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ABSTRACT

This sourcebook synthesizes findings from studies on school improvement programs. The prefatory overview emphasizes key themes and issues addressed in the seven papers that comprise the body of the document, discusses the role of staff development, and examines the process of translating research into policy. The papers summarize the findings of research according to different perspectives: (1) effective classroom practices in elementary schools; (2) effective classroom practices in secondary schools; (3) effective school practices at each level; (4) district and state-level practices which support effective school management and instruction; and (5) criteria and methods for measuring effectiveness. The second section presents a directory of successful effective schools programs currently implemented across the nation. It describes 39 programs, of which 13 were developed by local school districts, 9 by state departments of education, and 17 by other organizations, including regional laboratories, universities, and research institutions. A program directory index and a bibliography are included. (JD)

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REACHING FOR
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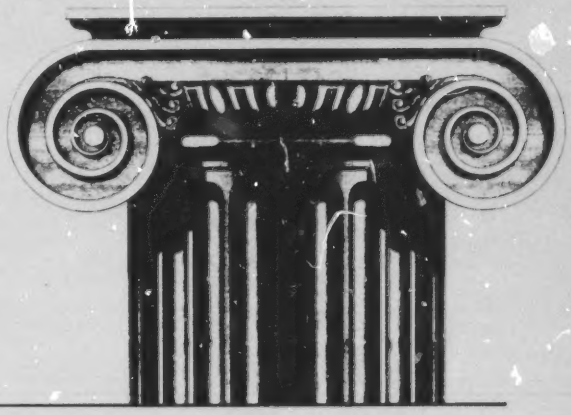
AN EFFECTIVE SCHOOLS SOURCEBOOK



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REACHING FOR EXCELLENCE

AN EFFECTIVE SCHOOLS SOURCEBOOK

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REACHING FOR
EXCELLENCE

AN EFFECTIVE SCHOOLS SOURCEBOOK

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FOREWORD

The last few years have been highly significant for American education. The National Commission on Excellence, which began its work in August, 1981, gathered important testimony from interested citizens around the country and input from professional educators at all levels. It also commissioned more than 40 scholarly papers. Based on this voluminous information, the Commission issued its report, *A Nation at Risk*, in April, 1983. The report has been well received by educators and general public alike. More importantly, it has served as a catalyst for debate and fostered renewed and vigorous interest in improving the quality of our nation's schools. Many policy makers and practitioners at the state and local levels are diligently involved in school improvement. To help them accomplish their purposes, they are turning more and more to the research community for assistance in sorting out the tremendous complexities of school renewal, thus forging a stronger and healthier partnership between practitioners and researchers than has existed previously. An excellent example of this new relationship is the Effective Schools movement, which has been responsible for generating one of the most positive and hopeful findings in recent years—that public schools which are properly organized and managed *can* make a significant difference in the educational achievement of children from disadvantaged communities. This finding has also served to increase our understanding of the factors which contribute to improving the quality of instruction for all students.

Based on the efforts of dedicated scholars during the last decade, we have been able to identify schools in urban areas where children from low-income families are performing well in school. Researchers have carefully examined these schools and have been able to describe characteristics that differentiate them from their less-productive counterparts. The findings have been influential in generating extensive research on school improvement. They have spawned a great deal of interest on the part of practitioners and policy makers on how best to implement the most useful outcomes of Effective Schools research.

The present document, developed from papers commissioned from several researchers in the field, by the National Institute of Education, presents concise summaries of the research base as well as a directory of programs around the country which are promoting effective practices at the building and district levels. We are pleased to share the dedication and hard work of all those who assisted NIE in this effort. It is through collaborative work such as this that education of high quality is being made available to America's children.

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Education

ACKNOWLEDGMENTS

Many people have contributed their efforts at various points in the development of this sourcebook. Special thanks are due to former Secretary of Education Terrel H. Bell who initiated the project, as well as to the present Secretary of Education William J. Bennett. Their support has truly been a commitment to excellence in education.

We want to express our gratitude especially to David C. Berliner of the University of Arizona, Lovely H. Billups of the American Federation of Teachers, and Peter R. Greer of the Portland, Maine Public Schools. All three participated in meetings and reviewed many portions of the sourcebook. We are also indebted to John Di Nunzio of the West Grove Public Schools in West Grove, Pennsylvania, James Fennessey of the Johns Hopkins University, Shirlie Hutcherson of the Hutchinson Public Schools in Hutchinson, Kansas, Judith Warren Little of the Far West Laboratory for Educational Research and Development, and James Vasquez of the Edgewood School District in San Antonio, Texas, for their advice on various segments of the project.

In the fall of 1984 we had the opportunity to pilot test some materials from the sourcebook through the cooperation of the Region III office of the U.S. Department of Education. The assistance we received from Eugene "Sonny" Kane, the Secretary's Regional Representative, and his staff, Gerald Weinstein and Patricia Carey, was most helpful. The thoughtful questions and comments of the participants in the seminars held in Washington, D.C. and Baltimore, Maryland guided us through a critical phase in shaping the sourcebook.

Several National Institute of Education staff have helped to nurture the work over the months. Michael Cohen, formerly a Senior Research Associate at NIE, first presented the idea to us. Virginia Koehler, former Assistant Director for Teaching and Instruction, was supportive of initial project activities. Senior Research Associate René C. Gonzalez has served as a thoughtful and concerned project monitor, and John L. Taylor, Acting Assistant Director of the Teaching and Instruction Division, has encouraged and prodded us as needed to the full realization of the work.

The design consultant for the Sourcebook was Lynette R. Ruschak. Barbara J. Dutchak of the E.H. White staff was responsible for all phases of production. Their patience and dedicated efforts transformed the individual components into a unified whole. Katana M. Dixon of the E. H. White staff assisted in organizing the planning meetings and follow-up activities of the project.

To all of these people and to others who have helped us at various stages in this endeavor, we express our gratitude.

The authors, of course, accept full responsibility for their own work.

THE EDITOR

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INTRODUCTION

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In the last few years, studies and school improvement programs have proliferated to such an extent that it has become necessary to develop a means of synthesizing and disseminating the best of this research, as well as to provide practical information about successful school effectiveness programs being implemented around the country. *Reaching for Excellence: An Effective Schools Sourcebook*, developed under a contract with the National Institute of Education, provides an integrated document containing summaries of the knowledge base and an up-to-date directory of programs and sources of technical assistance.

The overview to the sourcebook emphasizes key themes and issues across the chapters on research which appear in Part I. Included in the overview is an extended discussion of staff development. This issue emerged as one of great significance for practitioners in the course of pilot-testing the materials in the sourcebook. Finally, the overview addresses the process of translating research into policy, stressing the thoughtfulness and flexibility required in this endeavor, and providing several illustrations.

Of the seven chapters in Part I, six summarize the research according to different perspectives—effective classroom practices in elementary schools; effective classroom practices in secondary schools, effective school practices at each level; and district and state-level practices which support effective schools management and instruction. This section also includes a pivotal chapter on criteria and methods for measuring effectiveness.

It is necessary to point out that although each chapter was written by a single, nationally recognized scholar, its organization, scope and content were shaped in a collaborative process which engaged a number of other people. The project director, Regina M. J. Kyle, convened a series of meetings in Washington, D.C., in which each author met with a teacher representative, a superintendent of schools, two research consultants, and NIE staff to develop the chapter outline and conceptual framework. These meetings provided an excellent opportunity to discuss use of the sourcebook—its potential to serve multiple audiences in particular—as well as its presentation of the knowledge base, language, writing style, and format. Also, it is important to note that several of the chapters were pilot-tested during two meetings sponsored in conjunction with the Secretary's Regional Representative in Philadelphia. One meeting involved superintendent and board member teams, while the other convened officials from state agencies, state legislatures, and governors' offices. We believe the time and effort invested in producing, reviewing, and testing the various chapters did much to enhance the quality of the sourcebook.

Part II presents a directory of successful effective schools programs cur-

rently implemented across the nation. The directory's development reflects the advice of a group of practitioners and policymakers who met with its authors to discuss content and format.

The directory offers more information about effective schools programs than has appeared before in a single volume. It describes 39 programs; 13 developed by local school districts, 9 by state departments of education, 17 by other organizations, including regional laboratories, universities, and research institutes. These programs are currently in use in 1,750 school districts, and a total of 5,228 elementary, 1,424 middle and junior high, and 824 high schools. The range of programs in the directory embodies the significance of the effective schools movement. Although it began with empirical studies of effective inner-city elementary schools, it has expanded to rural and suburban districts, and into secondary schools. The programs appear in the directory alphabetically by the state in which they were developed. An index is also provided to facilitate access to programs by name, by developer, or by developer and user locations.

The sourcebook has assembled a massive amount of information. It may appear overwhelming to the reader—especially one struggling with problems at the school or district level. Let us encourage selective attention to the material—it need not be read cover-to-cover to be useful. Its sectional structure and preparation for three ring binding will facilitate work with sections as needed and at the user's convenience. However, we must also caution that the sourcebook is not meant to be used as a "cookbook." The process of implementing and sustaining an effective schools program in a district or school building requires considerable effort. We do not intend to suggest that the programs listed in Part II provide "instant solutions." Effective schools programs demand an investment of time and energy sustained over months, or even years. Administrators, curriculum specialists, staff developers, and teachers must make careful assessment of their own needs, identify the unique aspects of their local setting, study the applicable summaries of research, examine various programs in the directory which look promising, and, if necessary, collect additional information. In some cases, readers may want to contact the key individuals associated with a given program. We encourage this, because we know that in many cases, learning about the "implementation history" of an innovation or program is as important as learning about its conceptual framework. Procedures for using the sourcebook may be suggested by considering the following hypothetical situation:

> You are an elementary school principal in a large city whose concerns about the low achievement of pupils in your school are echoed by most of the other principals in your district. You are tired of hearing them complain about the situation and would like to engage them in doing something positive about it. You have heard about Effective Schools research, but don't really know much about its theoretical foundation or application at the elementary level. You might begin by reading Brian Rowan's chapter on the assessment of school effectiveness, turning next to Steve Bossert's chapter on effective practices at the elementary level. Here, you might learn that an effective way to improve and sustain a good instructional program in your district would be to involve the teaching staff in problem-solving and long-range planning. You would now like to know the particulars of a program which implements school-based planning. You would consult the directory and look for programs in your state (New York) which describe school-based planning. The directory would reveal

the School Improvement Project (SIP), in New York. Reading this entry would let you know whether a similar program might work in your district. It would also provide you with specific information about conditions for effective implementation, such as costs, staff time, and impact. You would now be able to adequately discuss with your colleagues the district's problems and their possible resolution. You would also be able to suggest remedies.

The sourcebook, although developed under contract, is not simply another tangible product. It represents an enthusiastic response from many talented individuals to one of the most demanding challenges of our time: how to narrow the gap between research and practice—between the empirical testing of good ideas, their impact in policymaking, and their practical application. We are grateful to E. H. White & Company for managing the many activities that brought together the key constituencies involved in the project. Meetings, the commissioning and reviewing of both parts of the sourcebook, and the pilot testing of materials by the firm transformed the sourcebook from idea to reality. If we have learned anything about the educational enterprise in the last decade, it has been that school improvement requires the convergence and sustained effort of these three constituencies—researchers, policymakers, and practitioners. However, for this to occur, a common language is required. Research findings and their implications must be presented lucidly, succintly, and without jargon. Just as research can inform practice under the right conditions, teachers, principals, superintendents, and other practitioners and policymakers can influence research. It is our hope that the sourcebook evolve beyond a set of reference materials into a widely-used and useful tool. It is our hope, also, that the sourcebook grow and change as the knowledge base grows and changes. In the final analysis, the success of our efforts will be gauged by how worn and tattered its pages become. We are pleased to share the work of many dedicated professionals and we invite the user to join us in the ongoing challenge of making the educational experience a healthy and productive one for America's children—our most precious resource.

SHAPING VISIONS: THEMES AND ISSUES IN THE SOURCEBOOK

REGINA M. J. KYLE
E. H. White & Company, Inc.

REACHING FOR EXCELLENCE: AN EFFECTIVE SCHOOLS SOURCEBOOK is a tool for understanding and for action. The authors and consultants involved in its development have prepared it to meet the special needs of those responsible for making decisions about elementary and secondary education. Its primary audiences, then, are superintendents and board members at the district level, and state education agency staff, legislators, and governors and their staff at the state level. While directed at these policy makers, the sourcebook will also prove useful to others in education.

This sourcebook can be used as either a complete document or in sections as components in preservice and inservice workshops and courses for both teachers and administrators. The program directory is an excellent source of information about what others have done, for those planning new initiatives for their own schools. Using the sourcebook in its entirety, individuals can gain an understanding of key areas of research and the implications of the findings of this research for their own work. The comprehensive bibliography points the way to further exploration of the research.

INTRODUCTION

This overview of the sourcebook contains three major sections: a discussion of key themes across the seven chapters of Part I, a brief essay on the role of staff development in attaining excellence in education in our elementary and secondary schools, and a look at some specific policies and practices being shaped at both state and local levels in the search for educational systems to meet both present and future needs of the nation.

The emphasis placed here on staff development is intentional. It is not an issue directly addressed by the literature on effective schools and effective classroom practices. Many of the findings of this research, however, have indirect implications for staff development. Current staff development practices in education are not adequate to support the changes needed to make all schools successful schools. As we worked with researchers, superintendents, teachers, board members, legislators, and staff from the offices of governors and state education agencies in shaping the sourcebook, it became very clear that we needed to address the issue of staff development directly. This we do in the second part of this essay.

When we first began planning the sourcebook, we thought about including a directory of state and local educational policies based on the effective schools research, similar to the directory of programs in Part II. It soon became evident that "policies" did not lend themselves to the same kind of organization and analysis as programs. It also became clear that, except in a few

cases, linking policies to the bodies of research forming the base of this sourcebook was impossible. The final section of this chapter examines the question of "policy into practice" using selected examples from both the state and local levels.

MAJOR THEMES AND ISSUES IN THE SEVEN CHAPTERS

The seven chapters in the first part of the sourcebook treat similar themes and topics from different perspectives, drawing on the research literature on effective schools, effective classroom practices, change in educational settings, organizational development, and program evaluation, as well as other appropriate sources. We look at several key themes and issues here, organizing them in four general categories: understanding what we mean by effectiveness; guidelines for action; organizational support for effective schools; and the role of people in the development of effective schools. This last issue leads directly into the essay on staff development.

Understanding What We Mean By Effectiveness

We tend sometimes to forget the obvious: phrases such as "effective schools" and "effective classroom practices" can become mere incantations masking different perceptions of what effective schools really are or what practices nurture learning in the classroom. The issue of what we mean by effectiveness is not a trivial one, as our devoting an entire chapter to the criteria of effectiveness demonstrates.

Rowan's chapter presents a careful analysis of the issues related to definitions of effectiveness. Both he and Corcoran remind us that effectiveness is a theoretical construct, an abstraction which we clothe with the reality of definition.

Rowan discusses the levels of evaluation existing in the same school and notes that one implication of a school's accountability to numerous constituencies is that different criteria of evaluation are being applied to the same setting. He reports that overall judgments of school quality made by these different constituencies weakly correlate with one another—and that no single group's judgment correlates highly with the results of standard achievement tests. This is a very important phenomenon for us to understand, especially from the perspective of those responsible for our schools at the state and local levels.

Focusing on three fundamental topics—what should be measured in evaluating school effectiveness, how measures of school effectiveness should be constructed, and what use can be made of measures of school effectiveness—Rowan presents an overview of two widely used approaches to evaluating schools, the goal-centered approach and the natural systems approach. His analyses lead to a series of recommendations that recognize and capitalize on the diversity of theories of school effectiveness. These lay the groundwork for our understanding the complexity of school evaluation and the relationships among the different measures of effectiveness.

His themes are touched upon by other authors. Schlechty reinforces Rowan's argument that organizational effectiveness is central to school management, and tells us that organizations using measurable output to direct individual and collective action are more effective than those using other criteria. Corcoran, in a thoughtful analysis of the effective schools criteria as these apply to secondary schools, points out the inadequacies of the criteria for secondary settings, as well as the lack of agreement in various studies about what criteria should be used to assess secondary education. Doyle carries these ar-

guments into his work on effective classroom practices in secondary schools. All of the authors stress the importance of our understanding the complexities of assessing educational effectiveness.

Taking a considered and thoughtful approach to promoting effective schools does not end with developing clear definitions of effectiveness and the multiple criteria needed to assess it. Achieving effectiveness also requires informed and careful use of the research base we have as a foundation for action.

Guidelines for Action: Approach with Care

One of the themes sounded by all seven authors is the thoughtfulness with which we need to approach using the findings from research as a basis for action. Bossert tackles this problem by reminding us that these findings should not be ignored—cumulative evidence as well as practical experience weeds them out. They are *necessary* but not *sufficient* elements for school improvement.

What elements are we talking about? It seems appropriate here to list the principal areas covered by the two main bodies of research used for this sourcebook: the effective schools research and the research on effective instruction. These are discussed in detail in the various chapters.

The effective schools research is often summarized briefly by reference to the "five factors" characteristic of schools given this designation. These are, in Bossert's version,

- A school climate conducive to learning—one free of disciplinary problems and vandalism;
- The expectation among teachers that all students can achieve;
- An emphasis on basic skills instruction and high levels of student time-on-task;
- A system of clear instructional objectives for monitoring and assessing students' performances;
- A school principal who is a strong programmatic leader and who sets school goals, maintains student discipline, frequently observes classrooms, and creates incentives for learning.

The major elements on which we have research in instructional management are time-on-task, class size and composition, grouping for instruction, curriculum, and evaluation.

In calling for a careful approach to using the implications of this research as the basis for action in school improvement projects, Bossert recommends that the research findings be viewed as *suggestive* rather than *prescriptive*. He, as well as others, makes the important point that the *process* of becoming successful has not yet been studied adequately—the research we have is primarily *post hoc* in nature. No single formula can be derived from it. We do not as yet understand how the individual factors work together in a particular setting to produce the desired results.

Bossert and Stallings are dealing with the largest body of research, that concerned with elementary schools and classrooms. Both of them stress the complexities of the issues involved and the importance of integrating the research on effective schools with that on effective instruction.

Stallings weaves together the many strands making up our knowledge of one key area of instructional management in her discussion of the research on time, perhaps the best known in general terms to the lay public as well as to the broader educational community beyond researchers. Time, in its manifestations as time-on-task, length of school day, and length of school year, far from

being a quick fix answer to the problems of low achievement, is a many-faceted stone in the crown of education. Mandating more time is not the solution to less than optimal use of already available time.

It is important to remember that Bossert and Stallings emphasize the need to interpret the findings from research and their implications for action carefully, in part because the richest body of research is that relating to elementary schools and classrooms. Corcoran and Doyle have less extensive and more ambiguous bases from which to work in looking at secondary schools.

Corcoran calls our attention to the fact that the effective schools research has become the foundation for new theories in education as well as the ideology of a movement promoting school improvement and greater equity in educational attainment. He draws on the work of Lightfoot and Lipsitz in making the distinction between *effective schools* ("safe, orderly schools where poor children, as well as middle-class children, perform reasonably well academically, as indicated by standardized measures of academic achievement") and *successful* or good schools meeting "more than these minimum expectations and . . . regarded as good schools by their constituents." This holistic concept of excellence reinforces the recommendations of Rowan about the criteria for judging school effectiveness.

Both Corcoran and Doyle remind us that the research base on effective schools and effective secondary classroom practices is much less comprehensive than at the elementary level. Corcoran adds to the base by including a series of studies on successful schools, as well. Doyle postulates that "findings from existing studies, when combined with related classroom and laboratory research, are beginning to suggest a comprehensive framework for understanding effective teaching."

The instances cited here only hint at the many reasons why all of the authors advise a careful approach to applying the implications from these areas of research in specific school settings. The intent is not to discourage reform based on what we know from research, but to encourage planning and implementation that recognize the complexities and ambiguities of both the individual settings for educational change—the schools—and the research base itself. Both are living, growing, dynamically changing entities.

This leads us, then, to a consideration of the support systems needed to promote the development of effective and successful schools.

Organizational Support for Effective Schools

Four of our chapters deal with different aspects of elementary and secondary education, using the building and individual classroom as units of analysis. In two other chapters, Schlechty and Odden address issues of organizational support. Schlechty focuses on the district perspective, while Odden suggests appropriate roles for the state to play.

The research base in both areas is very thin; little systematic analysis has been done on effective school systems, effective boards of education, or effective state support systems. This does not mean that action cannot and must not take place. Whether the formal knowledge base is rich or poor, school districts must still function, and decisions affecting education must be made at both state and local levels. Indeed, Schlechty suggests that the ability to act wisely in spite of limited knowledge and limited information is the mark of great school superintendents and effective school boards. Both Schlechty and Odden offer guidelines which should assist districts and states to foster the flowering of effective and successful schools in their respective jurisdictions.

Odden points out that change in schools began at state and local levels long before the series of reports—with *A NATION AT RISK* as the centerpiece—energized public debate and action beginning in the spring of 1983.

These reports built on a foundation already established in many areas. Odden proposes seven ways for states to help nurture and sustain an environment in which schools can flourish. These are:

- Providing symbolic leadership to raise the status of education;
- Articulating clear state educational goals;
- Building awareness of school effectiveness research;
- Developing system incentives that recognize and reward school effectiveness;
- Providing technical assistance to schools;
- Altering training and certification requirements;
- Strengthening state data gathering.

Both Odden and Schlechty focus on shaping a culture—an environment in which American youth can acquire the knowledge and skills necessary for them to take their place in the twenty-first century. Schlechty, however, also hones in on an area which links us to the next section of this overview and to our brief essay on staff development.

Drawing on the work of Peter Drucker, as well as on his own research and experiences, Schlechty highlights the important shift in recent decades to the management of knowledge workers within all types of organizations. He stresses that conditions required to make knowledge workers productive differ fundamentally from those which made earlier generations of manual workers productive in a different economy. This brings us to our fourth issue: the role of people in the development of effective and successful schools.

People in the Development of Effective Schools

The effective schools literature does not directly address staff development as such or its role in fostering the growth of effective schools. The literature does look closely at the leadership component in schools, in particular at the role of the principal. Like time-on-task in the effective teaching literature, the importance of the leadership of the principal has become almost a commonplace in discussions of educational change. And like time-on-task, facilitating leadership is a complex factor, irreducible to a single formula or approach. Both Bossert and Corcoran review the broader implications of the roles of key actors in shaping effective schools.

Bossert takes careful cognizance of the fact that while effective schools have strong principals, they also have teachers with a high degree of autonomy. These are by no means mutually exclusive. One of the questions we need to explore in more depth is how they are managed simultaneously. Since high school teachers have even greater autonomy than those in elementary schools, careful thought needs to be given to the ways in which we support and evaluate the leadership functions of the principal in these settings.

It is interesting to note here that in the schools selected in the first two years of the Secretary of Education's Secondary School Recognition Project, principals effected the leadership of their schools through a wide range of styles and activities, such as using team approaches to management, developing instructional leadership skills among key department chairs, being a visible presence in the school, focusing on hiring and staff development, working closely with parents and other members of the community, and maintaining close contacts with students. What also distinguishes the principals in these schools is their commitment to long-term planning, with, in some cases, a delegation of everyday administrative responsibilities to others. An important step in developing the leadership of the principal seems to be this shift from overwhelming concern with administrative activities to increased capacity for looking beyond daily routine to the accomplishment of broader goals.

If we were to emblazon one headline across all the pages of this sourcebook, it would be this: LIVING DOCUMENT. The research we are using here is not complete; it will continue to grow. This is why we have emphasized thinking about it as a set of guidelines for action, not as a recipe for instant results. Nowhere is this more true than in the research relating directly to the leadership functions of the principal.

The Research and Development Center for Teacher Education at the University of Texas at Austin recently released some findings from its Research on the Improvement Process program. During this study they found an important "assistant" to the principal in facilitating curriculum change and innovation, a person they are calling the "Second Change Facilitator." In some schools these were assistant principals; in others they were the resource teachers given part-time or full-time responsibility by the principal for assisting with the implementation of change. District or area level professionals not permanently assigned to the school—specialists and curriculum coordinators—also functioned in this role. What is important here is that this Second Change Facilitator existed in each school. As we learn more about the *process* of change in schools—currently a weak link in the effective schools research, as we noted earlier—we will understand better how leadership is shared in these settings and how better to implement new programs and sustain old ones. The key here, as in any organization, is the people.

AN ESSAY ON STAFF DEVELOPMENT

All education is human resource development. It matters little whether we speak of the education of our young people, the advanced education provided by postsecondary institutions, or the wealth of programs now available to men and women through their employing organizations, professional societies, and other groups. One of the most interesting developments to occur in business and industry since the end of World War II has been the shift in the titles and responsibilities of those in charge of personnel matters. Senior officials are now often called Vice Presidents or Directors of Human Resources rather than of Personnel or Industrial Relations. This corresponds to a major development in corporations in the United States—the growth of large programs devoted to employee education and training. Indeed, the argument can be made that the most important development in adult education since the end of World War II has been the expansion of business into education on a massive scale. Successful companies have come to recognize the central importance of nurturing the professional development of their employees.

If we are to bring about the changes needed in the education of our young people at the elementary and secondary levels, and if we are to integrate the findings from research into our strategic planning and our daily practices, then a similar revolution must occur in education. Continuing, thorough, and universal staff development must become part of the general order in public education at both the district and state levels. This development must be both systemic and systematic, including not only teachers and principals but all those responsible for policy and practice in education.

It is ironic, in an era when successful companies have recognized and committed themselves to comprehensive programs of employee development, that educational organizations at all levels have not yet adequately acknowledged the importance, for their own productivity, of the continuing professional development of their employees. Professional development, except for programs targeted to institute specific changes, is still largely confined to activities fulfilling state minimum requirements or left primarily to the individual. The necessary linkages have yet to be forged between continuing professional development and the needs of the schools.

The concept of staff development proposed here is not limited to teachers. At the district level it includes teachers, principals, and other professional personnel working within individual schools, as well as district level staff, the superintendent, and the members of the school board. The very nature of the world within which we live and work demands that those responsible for education at every level of activity be aware of developments in many different spheres of human knowledge. Our current systems do not provide for this.

A further irony in our emerging "learning society" is that one of the weakest links in the chain of continuing, lifelong education is the education of educators at all levels. The recent report of the Task Force on Education for the Education Commission of the States noted that "Among those dedicated people who choose teaching—and who choose to remain in the profession—the lack of opportunity for inservice training is deeply discouraging. Forty percent of secondary school science teachers have not attended a course or workshop in their subject area since they began teaching." This concern for teachers of specific subject areas is only one part of a deeper problem. All professionals in education, as well as the members of the broader community who sit on our school boards, need to be part of a strong, systemic program of continuing education—one that supports the goals and mission of both the district and the individual buildings where educators nurture and lead and students learn.

This systemic approach to continuing professional development of those involved in the education of youth is not solely the responsibility of the local district; it should be a function of the state as well.

The role of the state in promoting the continuing professional development of educators is two-fold: it encompasses responsibility for seeing that those who make policy or provide technical assistance at the state level are themselves aware of state-of-the-art developments in their respective areas, as well as responsibility for mandating/encouraging/supporting continuing professional development at the district level. To develop a truly systemic approach to the professional development of those responsible for education will require the participation of all the key state actors in education: the governor, the legislature, and the state education agency.

The development of such a systemic approach to education's most important resources—its human resources—also requires an articulating and ordering of priorities. If we truly believe that it is the people involved who make the difference—that the quality of those involved in the education of our youth determines to a large degree the success of that education—then the resources must be found to support staff development.

While there is little evidence that the kind of revolution needed in staff development is imminent, there are growing numbers of pilot projects that are addressing a range of staff development needs. Such projects exist at both the district and state levels. We mention a few examples here.

Concern about the effectiveness of principals, especially in the light of findings from the effective schools literature, has led some states to provide special technical assistance programs to districts, to promote the leadership skills of principals. South Carolina has an Assessment Center Program to provide districts with information for principal selection and to identify areas of greatest need for statewide staff development. This program began in 1981 when the South Carolina Administrative Leadership Academy proposed that the state work with the National Association of Secondary School Principals (NASSP) to implement their Assessment Center Program in the state. With the endorsement of superintendents and university schools of education, the first centers were implemented in 1982; by 1985-86, the Assessment Center Program will be implemented in each of South Carolina's districts, and every candidate for principal will be assessed before an appointment is made.

Maryland began its Professional Development Academy in 1977 to offer

training in school-building leadership to school principals, assistant principals, and other instructional leaders in areas such as supervision, evaluation, and increasing teacher effectiveness. The Academy based its programs on the findings from the effective schools research. The programs are designed to be comprehensive, with training and follow-up assistance covering an 18-month period, including the actual implementation of an action plan in the school of each participant.

The North Carolina Institute for Principals, operating within the Department of Public Instruction, provides ongoing training programs and other services for principals and assistant principals. Like many of the other executive training institutes developed by the states, this institute based its initial programs on the effective schools research. It sponsors a series of regional and statewide staff development seminars, covering topics developed on the basis of an annual needs assessment of regional advisory groups of principals and superintendents. In addition to the seminars, the Institute offers short-term internship programs, a business-industry liaison, a human resources data bank, a demonstration center on administrative uses of microcomputers, and an exchange program with the Harvard University Principal Center.

While many of the state level initiatives have concentrated on the selection and continuing education of principals, local intitiatives tend to focus more on teachers.

Pittsburgh offers a particularly intensive program through its Schenley High School Teachers Center, which provides an 8-week renewal program to teachers visiting from other Pittsburgh high schools. The creation and development of the teachers' center took 2 full years and involved a needs assessment and intensive program development with the collaboration of all interested groups. The first program was offered in the Center in the fall of 1983. High school faculty, in groups of fifty, take mini-sabbaticals of 8 weeks duration and spend these at Schenley, where the program focuses on three broad areas: instructional skills, adolescent development, and each teacher's content area. Before leaving the Schenley program, teachers meet with their principals to review the program and to develop a plan for classroom implementation. The program at Schenley has been supported by local foundations and the Allegheny Conference.

Private support for new initiatives in continuing education for educators is one way to get an important pilot project off the ground in a period of tight budgets. A newly developing comprehensive approach to continuing education for all professionals in the district is being supported in Louisville and Jefferson County, Kentucky by the Gheens Foundation. The Jefferson County School District and the foundation worked together for over a year on preliminary plans for the Gheens Professional Development Center. The Center is now in the first year of active start-up, with the executive director having been selected in the fall of 1984. The Center will offer a comprehensive range of programs to teachers and administrators, including staff from the district office. The uniqueness of this Center lies in its systemic approach to continuing professional education in the district, its inclusion of all professionals in its activities, and its close links to the business and professional community in the Greater Louisville area. Many of its programs will be based on the effective schools research, as well as the broader range of research on organizational development.

For those interested in undertaking new approaches to staff development, there is a growing body of literature on it, although little of this has been the product of systematic research. Some key readings are listed in the notes to this essay. One piece, however, deserves special note by local districts. Berliner and Fenstermacher prepared, for the Rand Corporation, a conceptual framework for looking at staff development. This framework is aimed at as-

sisting school administrators, staff development personnel, and others who have to appraise the value of staff development activities. It includes a definition of staff development, a mapping sentence, a description of the roles of participants, and an evaluation perspective for staff development. This last element is especially valuable in forward planning for new staff development activities.

We are at the start of a renaissance in continuing professional education for educators—a renaissance whose full flowering is dependent upon our recognition of the importance of these key human resources and our willingness to support the kinds of professional development that the educators in a knowledge-based society must have.

We have examined briefly here some of the factors that need to be considered as the staff development component of education is shaped at both state and local levels. What is our policy on staff development? What will it be for the future? Policies are made manifest, are embodied, in the practices through which we carry out policies. We stated at the beginning of this chapter that this sourcebook was intended to be a sound tool for policy makers, so we finish it by addressing, briefly, some issues of policy.

ON POLICY AND EDUCATION

The Oxford English Dictionary gives us several definitions for policy, ranging from the neutral one of an action adopted or pursued by a government to the characterizations of that action as wise, prudent, expedient, or politic. Policies, by their very nature, cannot be based on research in the same way as a practice within the building or classroom may be. They may, however, be informed and influenced by the findings from research. In formulating educational policy governors, state legislators, and state education agency officials work under the pressures of many constituencies. If these policy makers are to act wisely, they need to understand at any point in time what we do know about learning that will be affected by the decisions they make. There is a dual responsibility here: the policy maker should seek out the best information available at the time, and the education community must be prepared to translate the findings from research in ways that nurture the development of good policy. This is no less true for the policy maker at the local level, that is, school board or school committee.

Both Odden and Schlechty have reviewed the roles of policy makers at these levels and made recommendations about how these key actors can foster the environment within which effective and successful schools can flourish. They both recognize that decisions continued to be made and new policies adopted, even as the research on effective schools and effective teaching has been conducted and as the many different reports on education have been prepared and disseminated. While the policies enacted were not based on the research which is the subject of this volume, research—including effective schools research—has affected the shaping of these policies into practices.

Odden suggests that one key way in which states can promote effective schools is to alter training and certification requirements. Some states have already done so, establishing 5-year programs that include internships and alternative means to certification.

New Jersey has adopted the first standard route to certification for those without university teacher training. This was done with reference to the fact that current research has not established a systematic connection between education courses and effective teaching practice. The program endeavors to bring men and women of outstanding talent into the schools of the state. It provides for district-operated programs which must include: a preservice laboratory under the supervision of an experienced teacher; seminars on effective

teaching, curriculum, classroom management, and child development; an orientation to the district, including its organization, policies, and curriculum; and ongoing training and assessment by a professional support team. At the end of the provisional year, the professional support team will prepare a recommendation on certification. The State Board of Examiners will make the final decision on certification, while employment remains a local responsibility.

Oklahoma has taken a different approach to reforming the teacher training and certification process. Teacher training programs at all state universities now have limited entrance, the preteaching requirement for working with children has been increased, and each prospective teacher must pass a curriculum examination in the major field. Each new teacher is assigned an experienced classroom teacher as a mentor and advisor, as well as a committee made up of a teacher, an administrator, and a university faculty member to provide entry year assistance. The committee is responsible for observation, advice, feedback, and support. It is also responsible for the decision on certification at the end of the first year.

Other states have developed alternative routes to certification. Vermont has had a certification by evaluation program since 1969, and Georgia has had operational since 1980 a system to grant certification on the basis of classroom performance and teaching effectiveness. In the Georgia plan, there is an on-the-job assessment system administered by the 17 Regional Assessment Centers, with indicators of on-the-job performance developed by the University of Georgia. Both federal and state funds supported the development of Georgia's system.

In each of these cases, states looked at their needs and developed a means of responding to them appropriate to the conditions within the state. This is the key to all translations of research into practice. Another characteristic of some of these initiatives in teacher training and certification is the close involvement of the district. We saw this in the New Jersey example discussed above and it is also dominant in Colorado's process for the accreditation of its school districts, another means for supporting the development of effective schools.

Colorado links its requirement that districts undertake a 5-year planning and evaluation process with accreditation and a local accountability system. There are six stages to the 5-year plan for school improvement: assessing needs, establishing priorities, action planning, implementation, evaluation, and reporting to the public. Each year the school board must report on its progress to the state and to the district community.

The Colorado Department of Education provides assistance to the districts in planning and assessment. The department has developed two instruments for assessing educational quality based on the effective schools and effective teaching research: the "Indicators of Quality Schools" and the "District Indicators Supporting Quality Schools." These are not an official requirement of the planning and reporting process but they represent the most comprehensive attempt to date to integrate the findings from the bodies of research under consideration in this sourcebook with district self-evaluation.

If the findings from research are to have an impact on the formulation of policy on a wider scale than exists at present, then university researchers, state education agency staff, and local superintendents and boards are going to have to work together to ensure a constant process of translation from the researcher to the practitioner and policy maker. We cannot afford to make educational policy uninformed by the best of what we know at the time. Similarly, we cannot afford to translate these findings into a single approach. As each of our authors has stressed continually, the environment—the context of

the individual classroom, building, and district—is a critical and changing variable.

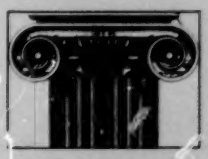
This book is a living document; use it as such. It should be the beginning rather than the end of your exploration to find the best ways to assure that the young people of our nation are truly ready to take their places as the leaders of the twenty-first century.

REFERENCE NOTES

Since this is primarily an overview of the Sourcebook chapters, there is no need to repeat here the references given in them. However, we would like to suggest the following readings in the area of:

1. **Staff Development.** A primary reference is G.D. Fenstermacher and D.C. Berliner, November 1983, A Conceptual Framework for the Analysis of Staff Development: (A Rand Note, Santa Monica, CA: The Rand Corporation). This paper contains a set of useful references. Of these we call your attention to: L.J. Bishop, 1976, *Staff Development and Instructional Improvement,* Boston: Allyn and Bacon; B. Dillon-Peterson, ed., 1981, *Staff Development/Organization Development,* Alexandria, VA: Association for Supervision and Curriculum Development; J.I. Goodlad, *1975, The Dynamics of Education Change,* New York: McGraw Hill; G.A. Griffin, ed., 1983, *Staff Development: Eighty-second Yearbook of the National Society for the Study of Education (Part II),* Chicago: University of Chicago Press; and A. Luberman, and L. Miller, eds., 1979, *Staff Development: New Demands, New Realities, New Perspectives,* New York: Teachers College Press.

PART I



THE KNOWLEDGE BASE AND ITS IMPLICATIONS FOR PRACTICE

EFFECTIVE ELEMENTARY CLASSROOM PRACTICES

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What should children learn in school? How should they be taught? What do we, as a people, value? In the stampede toward excellence it is important to pause and answer these questions. Take a moment and bring to mind the best elementary teacher you ever had. Say the name out loud and quickly list three qualities which make that teacher so special that you remember him/her over all these years. Ninety-two percent of the groups to whom I ask that question respond very similarly, whether they are high school seniors, college freshmen, teachers, superintendents of schools, or captains of industry. The terms used may differ somewhat, but the qualities are the same. Personal interest, warmth, and high expectations head most lists. "That special teacher really cared about me enough to make me work hard and make me think. That special teacher loved teaching and made classes interesting and fun. That special teacher was firm, fair, and clear, with high expectations; he/she believed I could do it and I did."

These are universal and timeless values—hard to measure and seldom researched. The findings from the effective teaching research conducted in the 1970s focused more upon classroom organization, time management, and structured interactions which can be more easily quantified than loving and personalized care. This is not to minimize the value of the research on teaching, but merely to keep a global perspective of what is desirable in classrooms.

FINDINGS FROM RESEARCH ON TEACHING

A great deal of research was conducted in classrooms during the 1970s. Initially, these studies were funded by the federal government and focused toward evaluating compensatory education programs. The question was: What is effective instruction for economically disadvantaged children? Because so little was known about effective instruction, most studies took a shotgun approach. The studies were correlational. Researchers observed in a large sample of classrooms and identified instructional variables being used where students were making achievement gains. Such classroom studies were taking place in Texas, Florida, Missouri, Illinois and California almost simultaneously. To the surprise and delight of all participants and the funding agencies, the findings from these different studies were quite consistent. The most potentially useful variable to emerge from that decade of research was *Time*.

Educators were eager for a quick fix for declining student test scores and they quickly grasped the singular notion of *more time*. Many schools lengthened class periods, deleted art classes, and extended academic time. They urged teachers to keep students on task. They were convinced that if student time-on-task was increased, an increase in student achievement would follow.

Keeping students on-task may seem like a simplistic notion, but it is a complex undertaking to make this construct useful in the classroom. Telling teachers is not very helpful. Teachers need to know how to make expectations clear to students; how to use time effectively in a variety of activities; how to vary time with different achievement groups; and how to provide appropriate lessons and support to keep students on-task. Research in the 1970s focused on the length of school days, actual scheduled class time, time allocated to academic subjects, teacher planning, and engaged time. Although these factors have most often been studied separately, they do interrelate. The length of the school day or class period is a school level policy and related to how much time is available for academic studies. Within the available time, teachers decide how the time will be used. These teacher decisions relate to whether or not students stay on-task. One purpose of this chapter is to illuminate those research findings that are specific enough to be useful and yet are not considered singular events isolated from the context of the classrooms and school. A second purpose is to describe some selected effective elementary programs that are currently in use.

Length of School Day

The length of a school day in elementary school or the length of a class period in secondary school defines the maximum amount of time available for instruction. Harnischfeger and Wiley (1978) found that the length of school days in the same district varied by 45 minutes for two second-grade classrooms. However, the variance of the actual time spent in class was only 8 minutes. First grade classrooms in the National Follow Through Observation Study (Stallings 1975) varied as much as 1 hour and 30 minutes in length of school day; secondary class periods for remedial reading varied from 40 to 55 minutes (Stallings, Needels, and Stayrook 1979). Findings from these studies indicate that mere length of the school day or the length of a class period in secondary school was not related to student academic achievement. A longer school day can simply mean longer lunch and recess periods. Stallings' work in elementary and secondary schools did not indicate greater student achievement in longer school days or class periods. How the available time was used was the important factor. Clearly, student learning does depend on the way in which the available time is used, not just the amount of time available. How a student is taught determines the quality and quantity of what a student learns.

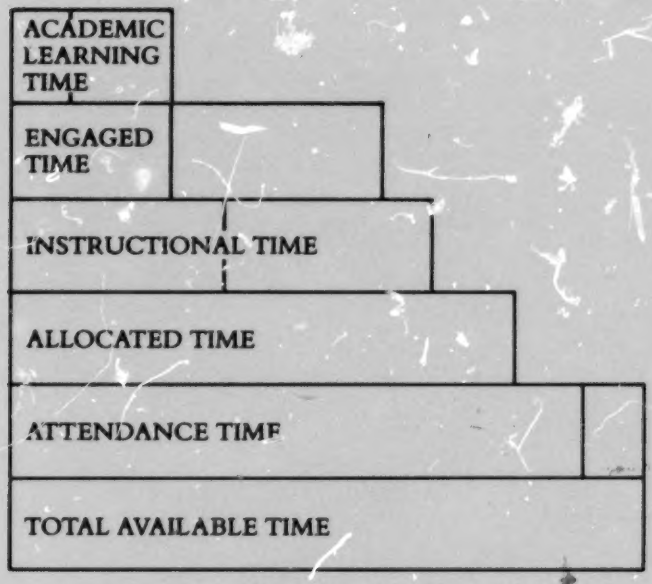
Use of Time

C. Fisher et al. (1978) reported that on the average, children in California spent 6 hours a day in school. Of that time, only 2 to 4 hours were spent in instruction. Within that instructional time, students were engaged from 1½ to 3½ hours, and of the engaged time for the total school day, students were involved with appropriate materials only 36 minutes to 90 minutes (see Figure 1).

Knowing that time should not be wasted does not provide much guidance for the teacher. More specific information was needed regarding how effective teachers use their time. To this end Stallings and Mohlman (1981) assimilated four data sets from secondary schools and identified how effective teachers of reading, social studies, math and science distributed their time across activities. They found that effective teachers spent 15 percent or less time in organizing or management tasks, 50 percent or more time in interactive instruction, and 35 percent or less time in monitoring seatwork (see Table 1). Effective teachers used some time to work with the total group, small groups, and individuals. While this distribution of time would not be appropriate for all grade levels or times of year, it is a framework that can help teachers think about the use of available time.

Figure 1

ESTIMATED USE OF TIME IN A SCHOOL DAY AND YEAR



	Hours / Day	Hours / Year
ACADEMIC LEARNING TIME	0.6-1.5	108-270
ENGAGED TIME	1.5-3.5	270-430
INSTRUCTIONAL TIME	2-4	360-720
ALLOCATED TIME	4.75	855
ATTENDANCE TIME	5.4-6.0	970
TOTAL AVAILABLE TIME	6.0	1080

Fisher, Berliner et al.—BTES

Lesson Plans

Decisions about the use of time should be made through a careful daily, weekly, and long range plan. Shavelson (1982, 25) suggests the following scheme:

1. **Long range yearly**—basic ideas for social studies, science—some for math and reading—basic structure of what will be done but not specific time.
2. **Term**—planning on a term basis for social studies, science, and for movies.
3. **Monthly**—deciding on basic units for social studies, science, and math. I decide on what I need librarian to get or what movies I need.
4. **Weekly**—use teacher's plan book—specific units and time element added—more detailed.
5. **Daily**—put schedule on board, getting actual materials out. (Yinger 1977)

Specific skills are needed to prepare a daily and weekly plan. Madeline Hunter's widely used Instructional Skills Program offers a detailed five-step lesson plan. Many school districts and state departments of education are disseminating these strategies. Significant relationships have been found in Phases 1 and 2 of a longitudinal study evaluating the relationship between

teacher implementation of the Instructional Skills Program and student engaged rate and achievement (Stallings, Robbins, and Wolfe 1983; Stallings 1984).

Long range plans are also important. According to Joyce (1979, 75):

> Most of the important preactive decisions by teachers are long-term in their influence as opposed to the influence of lesson by lesson planning. Relatively early in the year, most teachers set up a series of conditions which were to be powerfully influential on the possibilities of decision making thereafter. Lesson planning, to the extent that it goes on consciously, involves the selection and handling of materials and activities within the framework that has been set up by the long-term decisions.

In spite of best laid plans, the lesson may not go that way. Research by linguists indicates that while a teacher may plan a lesson, the lesson itself is modified as the teacher and students interact with the materials and activities (Green and Smith 1982). In summarizing several studies on planning, Shavelson (1982) suggests that prolific planning may be counterproductive if the teachers become single-minded and do not adapt their lessons to student needs.

Table 1

TIME ALLOCATIONS

ORGANIZING/MANAGEMENT ACTIVITIES (15 percent or less)	
Take Roll/Sponge	
Make Announcements	
Make Expectations *Clear* for the Period: Quality and Quantity of Work	15 percent Non-Academic
Organize Groups	
Clarify and Enforce Behavior Expectations	
INTERACTIVE INSTRUCTIONAL ACTIVITIES (50 percent or more)	
Review/Discuss Previous Work	
Objectives (Long and Short Range)	
Inform/Instruct New Concept	
Demonstrate/Give Examples	
Link to Prior Knowledge	
Question/Check for Understanding	85 percent Academic
Reteach Small Group (if necessary)	
Oral Drill and Practice (as necessary)	
Evaluate/Summarize (Did we meet objectives?)	
TEACHER MONITORING/GUIDING SEATWORK (35 percent or less)	
Written Work	
Silent Reading	

Classroom Organization and Management

There is no doubt that students in classrooms which are well managed perform better on achievement tests (Brophy 1979; Fisher et al. 1980; Good and Grouws 1979; Rosenshine and Berliner 1978). "Because successful classroom managers maximize the time their students spend engaged in academic activities, their students have more opportunities to learn and this shows up in superior performance on achievement tests" (Brophy 1982). However, knowing this fact will not help the teacher know how to achieve it. Observations by researchers Evertson, Anderson, and Emmer in both elementary and junior high schools (1980) were so specific that practice can be guided even for the first days of school. These researchers described in detail how effective teachers established and carried out their management plans, and subsequently developed a set of checklists for teacher use.

GROUPING

Grouping is a part of classroom organization. Children are grouped within classrooms for several purposes. Traditionally, students were placed in ability groups (high, medium, and low) so that teachers could provide instruction appropriate to the approximate achievement levels of the children. This practice has raised serious controversy regarding children's self images, motivation, and perceptions. Linguistic studies summarized by Green and Smith (1982) indicate that students in low groups have different input in terms of content, strategies for reading, and definitions of reading. Lessons for low groups consistently placed greater emphasis on pronunciation, grammar errors, and single word decoding. The high groups were encouraged to "go for the meaning"; their pronunciation and grammar errors were often ignored. Weinstein (1982) described how children perceive the teacher's relationship to high and low achieving students. Students described as low achievers received more negative feedback and teacher direction, and more work and rule orientation than high achievers. High achievers were perceived as receiving high expectations, and more opportunity and choice than low achievers. No differences were documented in the perceived degree of supportive help. Unfortunately, we do not know the achievement effects upon the high and low achieving students who received differential treatment.

There is research from studies of reading and math that indicates ability grouping has a positive effect upon achievement. The Direct Instruction Follow Through Program (Becker 1977) has consistently had a positive effect upon children within reading and math ability groups. This program does, however, allow children to change from one group to another as their progress warrants. The National Follow Through Study also found a positive effect from ability grouping. Low achieving students profited in math from a longer period of study more than did high achieving students (Stallings 1975). When and how teachers work with each group is important. Research in progress indicates that it is more effective to work with the medium achievement reading group first, the low group second, and the high group last. In this manner, students in the lowest group, who are likely to have the shortest attention span, do not have as long a time at the beginning or end of the period to work independently (Stallings et al. 1983).

During group work, effective teachers make clear when students can ask questions and of whom they can ask questions. They do not allow students to interrupt during focused small group instruction (Evertson et al. 1980). However, Green and Smith (1982) reported that this signaling of what is acceptable and what is not is a complex process. If teachers do not respond to students' requests for help as needed, the student has several alternatives: the student can (1) attempt to overcome the problem or make a decision on his/her own, (2) ask another student for help, (3) switch to an alternative activity, or (4) ap-

proach the teacher anyway. Each decision carries a different outcome for the student. Teachers should be aware of these student options and have strategies to assist students to stay on task until help can be offered.

Groupings are also used for cooperative learning and to establish good interpersonal relationships and group dynamics in the classroom. Several researchers have developed methods to bring about student cooperation (Aronson et al. 1978; Slavin 1980). They have developed a variety of activities in which students of different achievement levels form groups to complete tasks requiring the participation of all students. In one approach, each member of the group possesses at least one key item of unique information which is essential to the group's success. The problem encountered encourages everyone to participate. In some cooperative approaches, participants receive a group score rather than an individual score. The group score could be based upon the gain made by each participant. Such procedures motivate the high, medium, and low achieving students to cooperate and achieve.

It is important to note that children are not likely to know how to work in groups productively unless some training is provided. Wilcox (1972) found that students trained to lead groups by encouraging all to participate and being certain that everyone had a turn were better at solving specific problems than were untrained or leaderless groups. The trained student leader groups were also better group problem solvers than were classroom teachers, who tended to do all the problem solving themselves.

DISRUPTIVE STUDENT BEHAVIOR

The findings on disruptive behavior are very clear in all of our studies. In classrooms where students evidence more misbehavior, less time is spent on task and less achievement gain is made by students. There are many techniques effective teachers use to manage student behavior. The study of the first days of school by Evertson, Anderson, and Emmer (1980) yielded some specific recommendations: define rules and penalties before school starts (coordinate with school rules), teach rules and procedures to students during the first days of school, consistently monitor and reinforce rules, reward, acceptable behavior, and punish appropriate misbehavior.

There are some behavior management programs such as the Assertive Discipline Training Program (Cantor) and the Classroom Management Training Program (Jones) which bring peer pressure to bear upon individuals. These programs offer rewards for good behavior (special games, activities, scrip, recognition) and withdraw privileges for bad behavior. Such programs are effective in stopping the problem, but they do not necessarily solve the problem.

Problems of an interpersonal nature need to be solved. Glasser's *Schools Without Failure* (1969) offers group problem solving methods and techniques to help students develop responsibility for their own behavior. Brophy (1982, 35-36) summarizes the ten steps of this process. While there is little systematic research on the Glasser program, survey data (1977) indicate fewer referrals to the office, fighting, or suspensions among students in classes implementing this program.

Instruction

Now that the stage is set—furniture and materials placed, lessons planned, and strategies ready for dealing with disruptive behavior—instruction is about to begin. Instruction can and should follow several formats determined by the participants, subject matter, and objectives of the lesson. There are no panaceas for every situation.

There are several theories about how the mind works and what might be the most effective instructional strategies. Three areas of research on learning

have yielded useful implications for classroom teaching; these deal with (1) memory, (2) understanding, and (3) reasoning or problem solving. All three of these functions are necessary for students to process and use information. Memorizing facts increases students' ability to easily retrieve information from long-term memory, thus allowing more space in the mind for understanding and problem solving. For example, the more automatic a student's memory of the times tables, the more mental energy can be devoted to problem solving as in word problems.

MEMORY

Memory skills are essential for lower elementary students to succeed in basic reading, writing, and computation. Ample research in the 1970s indicates that a very structured, carefully sequenced approach is effective in developing memory skills/basic skills. Rosenshine (1982) in summarizing this literature says:

> In general, to the extent that students are younger, slower, and/or have little prior background, teachers are most effective when they:
> - structure the learning experience
> - proceed in small steps but at a rapid pace
> - give detailed and more redundant instructions and explanations
> - have a high frequency of questions and overt, active practice
> - provide feedback and corrections, particularly in the initial stages of learning new material
> - have a success rate of 80 percent or higher in initial learning
> - divide seatwork assignments into smaller segments or devise ways to provide frequent monitoring
> - provide for continued student practice (overlearning) so that they have a success rate of 90 to 100 percent.

These interactions are started by the teacher presenting a small bit of information, asking a question, and calling for an individual or group response. Praise is offered if the answer is correct and correction is given if the response is incorrect (Anderson, Evertson, and Brophy 1979). The ample research conducted in the 1970s shows that most students can, through sufficient drill and practice, memorize almost anything.

UNDERSTANDING

In addition to facilitating students' memorization of facts, instruction should also develop students' understanding of the lesson content. Cognitive psychologists have studied linkages between new information and prior knowledge. Teachers need to help students make these linkages. Every student walks into the classroom with some experiences and knowledge. How the teacher structures the new information makes a difference in what students will be able to link to their existing information. Calfee and Shefelbine (1981) describe the mind as a filing system where there are hooks or pegs on which to hang information. This filing system is essentially the long-term memory from which the information can be retrieved and used in other situations.

For information to be filed, it must first be noticed. Broadbent (1975) wrote that only some of the information presented will receive attention, and if this selection is not decided deliberately, it will certainly be decided by chance factors. If something is not noticed at the time it happens, it has hardly any chance of affecting long-term memory (or the filing system as Calfee and

Shefelbine describe it). It is the teacher's role to be certain that students have noticed the information and made a link with existing information, thus guaranteeing storage in long term memory.

The importance of teachers' checking for understanding was shown in a study conducted by Webb (1980). In a group problem solving task, those students who received an explanation after making an error solved the problem correctly on another trial. The explanation did not have to be directed toward the student, but could have been directed toward another student within the same group. Those students who never received explanations after an error were not able to solve the problem on the second trial.

Some educational programs, such as Madeline Hunter's Instructional Skills, include a step that requires teachers to check for student understanding before proceeding with instruction. If students do not understand, the teacher restructures the task and provides different examples and experiences to build the required background knowledge. The positive effects of this model upon engaged rate and achievement are reported by Stallings (1984). However, student outcomes such as comprehension and understanding are not tested.

While the theory on student understanding and the need for linkage is strong, the research findings are meager to date. The studies tend to have small samples, and experiments that teach teachers strategies which will increase student understanding and lead to testable outcomes are generally lacking. More studies such as Webb's are needed.

PROBLEM SOLVING/REASONING

The need to train students in problem solving or reasoning skills has been receiving increasing attention, both from the educational system and from industry. In a recent survey of electronics firms in California's Silicon Valley, business leaders were asked to identify the skills most lacking in their recently hired employees, and which skills the educational system should help students to develop to become effective employees. The majority of the respondents reported that the schools should help students develop problem solving skills, for such skills were needed by employees at all levels (Needels 1982). The respondents reported that at the present, many of their recently hired employees,whether high school or college graduates, were deficient in that cognitive area.

G. H. Hanford, President of the College Board, notes that, "The decade-long decline in test scores appears largely due to the fact that reasoning ability in secondary schools is not what it used to be. In recent years, students in lower grades show marked improvement in reading, writing, and other basic skills, but students fall behind when problems get more complex." The College Board is currently funding a study to identify ways reasoning and problem solving can be taught (1983).

One of the difficulties in studying problem solving has been the lack of group administered tests that can examine the thinking skills of young children. The tests usually require individual administration and this prohibits large scale studies. Another problem is in identifying and measuring the classroom teaching skills expected to be related to gain in thinking skills. One anomaly is a study of 52 Follow Through classrooms (Stallings and Kaskowitz 1974) which reports the relationship between teaching behaviors and scores on a group administered test of non-verbal problem solving skills. These findings indicate that student scores were higher on that test in classrooms where the structure allowed students to take more initiative. In such classrooms, students asked more questions, worked more independently with manipulative materials, and worked more often on group tasks in cooperative activities. Teachers asked more thought-provoking questions and provided less overt praise and correction. The lessons were not quick paced such as those used to develop memory skills.

Inquiry methods are expected to develop problem solving skills. Collins and Stevens (1982) identified instructional strategies used by expert teachers who use inquiry methods effectively. The authors identified five strategies: (1) systematic variation of examples, (2) counter examples, (3) entrapment strategies, (4) hypothesis identification strategies, and (5) hypothesis evaluation strategies. Even though the teachers observed by Collins and Stevens taught different content areas, the authors reported that these strategies were consistently used by all the teachers, thus the strategies probably are not domain specific but can be applied to different content domains.

Teachers need to be trained to think of the psychological processes and structures which the student must develop to produce the desired behavioral objectives. Any one lesson could require drill and practice, checks for understanding, and problem solving. It is the instructional repertoire that teachers need, and the knowledge of which strategy is likely to develop memory, understanding, or reasoning. The important thing is that preservice teachers do not embrace extreme or singular points of view. Broadbent (1975, 175), in speaking of extremes, says that:

> The lesson of cognitive psychology is that each of us acquires during life certain strategies of encoding the outside world, of organizing memory and of proceeding from one step in an operation to the next, and that these may be highly general in their later use. The successful teacher, of course, has always known this, but in standing out for the middle ground between mechanical drill on the one hand and the abandonment of all positive teaching on the other, he/she can now claim the support of contemporary cognitive psychology.

Teacher Judgment and Expectations

All teachers make judgments about students' abilities and develop a set of expectations which guide the curriculums they offer and the instructional strategies they use. Teacher judgments of student achievement are based upon student reputations and observations of classroom behavior, work habits, products, classroom participation, and test scores. Although these judgments are fairly accurate, they tend to impact upon expectations for low achieving students in a self fulfilling way.

In a summary of studies on teacher expectations, Brophy and Good (1974) indicated that students for whom teachers held low expectations were treated less well than other students. They tended to be seated farther away from the teacher. They received less eye contact and were smiled at less often. They received less instruction, had fewer opportunities to learn new material and were asked to do less work. Teachers called on these students less often and tended to ask them simple rote-answer questions. They were given less time to respond and fewer guides or probing questions when their answers were wrong. Obviously, they remained low achieving students.

In an effort to change teacher and student perceptions of low achieving students, Dershimer (1983) trained a group of teachers to ask higher level questions of low achieving students. The questions illicited ideas, hunches, or opinions. When students in the class were asked to check a list for the names of those who made good contributions to the class discussion, low achieving students' names were checked. In classrooms where teachers asked low achieving students simple questions, these students were not rated as making contributions. This point is important. If teachers do not expect that students can take part in a higher level of discussion, these students are not given a chance. In the case of high achieving students, high achievement is reinforced, and similarly, low achieving students' low achievement is reinforced.

EFFECTIVE ELEMENTARY PROGRAMS

A second purpose of this chapter is to describe some selected elementary educational programs and classroom practices that are currently in use. Three of these programs are based upon findings from research regarding instructional strategies and student achievement. Three are theory-based educational models. Your job as the reader is to determine which educational programs or models incorporate the values which you hold for the children in your schools.

Experimentally Based Programs

Three groups of researchers based training programs on research findings from experiments which compared the achievement rates of students whose teachers had been trained to perform specific instructional tasks (treatment groups) to the achievement rates of students whose teachers had not received such training (control groups). These effective practices were translated into the following inservice staff development programs: Effective Classroom Management, Missouri Mathematics Program, and Effective Use of Time Program.

EFFECTIVE CLASSROOM MANAGEMENT IN THE ELEMENTARY SCHOOL

It is very clear from the research on effective teaching that classroom organization and management have a strong influence upon students' time spent on task and student achievement. How and when effective teachers deliver their management plan is not so apparent. To understand the manner in which organizational processes evolve, Evertson, Anderson, and Emmer (1980) studied how teachers made procedures and rules clear from the first days of school. The researchers accomplished this through a series of anecdotal records of all organizational and behavioral statements made by the teachers. The classrooms were observed several times through the year to determine the change in teacher and student behaviors. Effective managers were identified on the basis of clarity and enforcement of rules and procedures and student engaged rates. The payoff was less student misbehavior in the classrooms of effective managers. Findings from the study were so specific that the research staff was able to develop books containing guides and checklists which help teachers prepare for the opening of school (see the bibliography). These books are widely used in school districts and schools of education throughout the country. In addition, the Association for Supervision and Curriculum Development (ASCD) has prepared a videotape of the first day of school based upon this work. It is especially useful for new lower elementary teachers (see the bibliography). This program has been adopted as a major staff development program by the Arkansas State Department of Education and numerous school districts throughout the country.

MISSOURI MATHEMATICS PROGRAM (MMP)

The MMP is based upon a major systematic research program that was conducted in the mid 1970s and early 1980s by Good, Grouws, and Ebmeier at the University of Missouri. It is a whole class model of instruction with features derived from studies of effective teachers whose students consistently performed well in mathematics. A key descriptor of the model is "active teaching." The program consists of regular sequences of review, direct instruction, monitored seatwork, and homework assignments. There is a high ratio of active teaching to seatwork, with an emphasis on teaching mathematics in the context of meaning, frequent questions and answers, rapid feedback, and management strategies intended to increase the amount of time students

spend on task. The MMP has proven to be effective in helping elementary and secondary students improve their scores on math achievement tests.

The model is very structured; it provides a weekly schedule of activities and the amount of time to be spent on each activity. Lessons always start with a check of homework and a review. What did we learn yesterday? What can we expect today? Then there is a daily exercise in mental computation . . . no calculators or pencils. This exercise provides an opportunity for children to think about the problems—an activity missing from most curriculums. This is followed by instruction in the new concepts, checks for understanding, and monitored seatwork. Seatwork is always checked before homework is given to make certain that students are not practicing errors. Homework should be a practice of what has been learned, not a new challenge. Finally, the lesson is concluded with a summary of what has been learned and homework is assigned. Mondays are designated for weekly and monthly reviews so that what has been learned will be retained. On the other 4 days of the week, within a 45-minute period, the authors specify the following allocations of time:

Time	Activity
8 minutes (17%)	Homework Review Mental Computation
20 minutes (45%)	Development
15 minutes (33%)	Monitored Seatwork
2 minutes (4%)	Lesson Conclusion Homework Assignments

The MMP is widely used throughout the country. It has been adopted by several state departments and is in use in over 50 school districts. The book prepared by Good, Grouws, and Ebmeier (1983) and a videotape describing the MMP, available from ASCD, are primary means of dissemination.

EFFECTIVE USE OF TIME

In 1978 Stallings, Cory, Fairweather, and Needels, funded by the National Institute of Education, went beyond the global allocations of academic learning time to examine how teachers and students spent time within the parameters of a reading class. Table 1 illustrates how effective teachers were observed to use their time. The findings were specific enough that a staff development model was developed and tried experimentally in 52 classrooms (Stallings, Needels, and Stayrook 1979). Students in the trained teachers' classrooms gained 1 year and 8 months in reading—8 months more than the control group. The focus of the program is on helping teachers become aware of how activities they plan are related to the time students spend on academic tasks. The program is aimed at helping teachers organize, manage, and deliver instruction.

This training model was designed to provide objective data on how much teachers change behavior as a result of the training. Each teacher is observed before the training starts and after the training is completed (see Table 2). From these observations, a profile is prepared of teacher and children classroom behaviors. For each variable there is an established criterion based on findings from four studies of effective classrooms. This criterion appears on the profile (see Figure 2). The initial criteria are most appropriate for secondary school academic classes (that is, English, reading, math, social studies). Lower elementary classes and classes such as typing, art, and physical education might have different criteria.

Table 2

AN ACCOUNTABILITY MODEL

BASELINE/PRETEST

Observe teachers.

Prepare individual profiles of behavior.

Assess what change is needed: make recommendations.

Start where teachers are.

INFORM

Provide information.

Link theory and practice.

Check for understanding: elicit practical examples.

GUIDED PRACTICE

Provide conceptual units one at a time.

Help teachers adapt to own context and style.

Assess and provide feedback.

Obtain commitment to try a new idea in class the next day.

Support and encourage change.

POST-TEST OBSERVATIONS

Observe teachers: prepare second profile.

Provide feedback to teachers.

Assess training program for effectiveness.

In groups of six to eight, teachers attend seven 2½-hour workshops. The following topics are covered:

- Receive profiles and set individual goals
- Classroom organization and management
- Behavior motivation and control
- Lesson planning
- Interactive instruction levels of thinking and feedback strategies
- Receive 2nd profile; analyze and set new goals
- Receive 3rd profile; analyze and set new goals.

At the first workshop teachers receive their own profile and an explanation of the effective teaching research. Within the parameters of the 50 variables observed, each teacher makes a commitment to improve on problem areas of his or her own choosing. This component of the model allows veteran teachers to set goals which are likely to be very different from the goals of new teachers; it also allows elementary teachers to set goals different from those of secondary subject matter teachers.

This program allows the teachers to integrate ideas into their own setting while providing an opportunity for teachers to talk to each other about teach-

Figure 2

PROFILE OF SARAH SMITH

ACTIVITIES PER % OF TIME	R*	CRITERION	TEACHER BASELINE PERCENT	TEACHER POST-OBSERVATION PERCENT
PREPARATION				
Making Assignments	MORE	10	8	
Organizing	LESS	2.5	7	
Teacher working alone	LESS	2.5	15	
INTERACTIVE INSTRUCTION				
Review / Discussing	MORE	10	6	
Informing	MORE	25	14	
Drill / Practice / Test	MORE	9	2	
Oral Reading	MORE	6	2	
MONITORING**				
Written Work	OK	2	20	
Silent Reading	LESS	15	20	
OFF-TASK				
Students Socializing	LESS	2.5	8	
Students Uninvolved	LESS	2.5	15	
Teacher Disciplining	LESS	1	6	

*R = RECOMMENDATIONS
**STUDENTS WORK ALONE

Stallings Teaching and Learning Institute

ing. Peers work together as colleagues, observing each other and developing norms for what they are doing. The program encourages reflective teaching and experimentation so that teachers learn to evaluate and develop an understanding of cause and effect.

Although the program was initially developed for use in secondary classrooms, The Effective Use of Time Program has been successfully adapted for use in elementary classrooms. During the last 5 years, hundreds of teachers have been enrolled in this program in all parts of the country. It has been adopted by the Tennessee, West Virginia, and Washington D.C. Departments of Education as part of their staff development program. One difficulty of the program is that it must be disseminated by certified trainers who train other teachers. Adopting this model requires a long-term commitment. Teachers change habits slowly and this model attempts to have teachers integrate the ideas into their own schemes (see reference notes).

Theoretically Based Models

Mastery Learning, Cooperative Learning, and Instructional Skills are widely used popular educational models based upon a theoretical approach rather than research findings. Each of these models will be described in terms of theory, practice, and student outcomes.

MASTERY LEARNING

The underlying assumption of the Mastery Learning Model is that nearly all students can learn the basic school curriculum, but it takes some students longer than others. Theorists of Mastery Learning describe three factors affecting learning rates: prerequisite knowledge, interest and motivation, and quality of instruction. Bloom, the developer of the model, believes that the differences in the amount of achievement shown on final examinations are the artifacts of the nonmastery procedures used in schools. Time, not native ability or entering achievement, explains these differences. Some students come to new units of study with low motivation from previous failure and inadequate background information. These students fall progressively further behind in achievement and their attitudes become more negative. The answer to this problem is to provide the prerequisite skills and the time needed for all students to master the content of each lesson. There is some evidence that students in mastery programs, after gaining the prerequisite knowledge, become increasingly faster in their lessons than nonmastery students. Bloom (1976, 191) suggests that under Mastery Learning "the differentiation between good and poor learners or fast and slow learners tends to be reduced to a point where it is difficult to measure in hours and minutes." Advocates of Mastery Learning believe that the variability in student learning time can be reduced until a vanishing point is reached. Critics of Mastery Learning question the degree to which slow learners speed up or fast learners slow down.

Essentially, Mastery Learning is an instructional strategy which requires the learning of structured hierarchical sequential units of material. There are two principal formats for presenting the material. Teachers may introduce the unit to the whole class or students may work independently at their own speed through the units. In either case, students are given tests at the end of each unit. If they do not achieve 80 to 90 percent correct, they receive more instruction and time until they can achieve a mastery grade on a retest.

There are some problems inherent in both instructional strategies. First, whole group instruction requires that the teacher keep the group working on the same unit. If the teacher waits for all of the students to reach mastery of a unit before going on to the next unit, and if some of the additional learning time comes from class time, then achievement costs to fast learners seem inevitable. In the other case, where students work at their own pace, there is little time for teacher instruction for each student; for example a 50-minute period divided by 25 students allows no more than 2 minutes per child. Obviously some children receive more than 2 minutes and others receive none at all. Researchers report that some children tend to be competitive and rush through the books (Buckholdt and Wodarski 1974; Levine 1983).

Mastery based programs have been embraced by hundreds of school systems in this nation and around the world. As with many innovations, those employing the new program did not carry out studies to measure program effects. Where studies were conducted they were often poorly designed. Block and Burns (1976) summarized six studies conducted in elementary schools. Of those, two had non-equivalent control groups, five had post-test scores only, five used criterion tests to assess mastery, and only one used standardized achievement test scores (Anderson 1976). Of the five studies using criterion tests at the end of the units, three studies reported significant positive results for mastery students compared to control groups. Anderson had achievement test scores for 18 classrooms. Of these, three performed significantly better on the tests than did the control groups. Eight classes scored higher than control groups, but with no statistical difference. Three control groups scored statistically higher than the mastery groups, and four control groups merely scored higher than mastery classrooms. These findings may indicate a positive trend for the mastery program but certainly not a ringing vote of confidence in the

superiority of mastery students' performance on standardized achievement tests or criterion tests.

Time is the heart of the matter for Mastery Learning. How do fast and slow learners fare in this regard? Research by Arlin (1984) contributed some insight to questions such as: Do the differences between fast and slow learners decrease, increase, or remain stable over time? Are faster learners held back waiting for slower learners, and if so, does this holding back increase, decrease or remain stable over time? Two studies were reported: the first examined students in four elementary classrooms during ten consecutive lessons, and the second examined the variability of all students in one school who began first grade in September 1977 and who were in the Mastery Learning program for the next 4 years. In the first study the difference between fast and slow learners remained stable across time. Further, the time required to bring slower students to mastery remained stable. Faster students were consistently held back with alternative activities while waiting for slower children to catch up. Results from the second study also indicated that differences between fast and slow learners remained stable or increased over the four years. Many of the students who needed extra time during the early years were the same students who needed extra time toward the end of the study. The results of the two studies conflict with claims of Mastery Learning theorists that Mastery Learning procedures will minimize achievement differences and time differences simultaneously. Arlin states, "While it was possible to minimize achievement differences in both studies by insuring that most students achieved at similar mastery levels, it was not possible to minimize the differences between students in the time needed to achieve this mastery" (1984, 117). Thus, educators implementing mastery programs with the expectation that individual achievement will equalize, as well as the time it takes to learn, may be disappointed.

The appeal of Mastery Learning, I think, is the expectation that most students in our schools can learn what is being taught in the classrooms. Given this premise, scores or grades do not need to be distributed along a bell shaped curve. Everyone can succeed. The fact that it takes some children more time and will continue to take them more time seems of secondary importance. The teacher's job is to provide accelerated activities for those who do go faster and enough time for mastery for those who go slower. The greatest vote of confidence for Mastery Learning is from those school districts which continue to use the program and indicate that school test scores are improving.

COOPERATIVE LEARNING

Most classroom environments encourage competition rather than cooperation, and yet to be successful in the world of work, in our communities, and within families, we must be able to cooperate with our fellows as well as compete. Outside of teams in athletics, music, and drama, there are few opportunities within schools or classrooms for students to develop cooperative skills. Cooperative learning programs have been designed to fill this void.

Several cooperative learning programs have been developed during the past decade. Sharan (1980) identified five such models. These are grouped according to peer tutoring and group investigation. Slavin (1980) presented a topology of the characteristics of nine techniques used in cooperative learning approaches. The outcomes examined included achievement, social variables, and race relations. While models may vary in structure, the intent of each one is to increase cooperation and increase student achievement.

The task structure of the various cooperative models may differ. For example, in some programs children work on a learning task as a group. This format is presumed to encourage truly cooperative learning and peer tutoring. In other programs, the task is divided up and members of the group work

independently, joining for help as needed. The rewards of cooperative learning programs also differ. For example, the reward or grade might depend upon a product cooperatively produced by the group or the average of the individual members' performance.

Cooperative learning is presumed to raise students' value for academic achievement and encourage them to help and support peers in their group, rather than compete against all of their classmates. Thus, as in sports where individual excellence is encouraged because it benefits the whole team, team competition in the classroom results in greater student support of each other's achievements.

Cooperative learning theorists also believe that students can learn from each other, and their cooperation can benefit both high and low ability children. The high ability child achieves a higher level of understanding in the process of helping slower children, and the lower ability child benefits from the other children's assistance.

Cooperative models are intended to be an alternative to the individual competitive model characteristic of most classrooms. The competitive model is motivational only for those children who perceive they have a chance of winning. Research shows that many academically disadvantaged children expect to do poorly no matter how hard they try, and eventually cease trying; they don't compete (Covington and Beery 1976). A group reward structure is expected to increase motivation for low ability students. Evidence suggests that simply being a member of a successful group, regardless of the child's own performance, allows the child some of the advantages of success, satisfaction, and peer esteem (Ames 1981). Group competition presumably pits groups of equal ability against each other, and consequently all groups/all children can experience winning on occasion.

Another goal for cooperative learning programs is to improve race relations in the schools. The assumption is that if children from different ethnic groups work together, they will learn to appreciate each other's strengths. In this arena they are more likely to develop interracial friendships.

The goals of cooperative learning are certainly laudable. The question is to what degree are they being achieved. The most comprehensive research has been conducted on the Teams, Games, and Tournaments (TGT), a program developed by Slavin (1983). TGT has been evaluated in a variety of elementary classroom situations. In a study of 53 third grade students, TGT students scored higher on a vocabulary and analogies test than did control children. In a study of 456 fourth and fifth graders, TGT students scored higher than control students on the Comprehensive Test of Basic Skills mathematics computation subscale but not on mathematics concepts and applications subscales. Positive effects for TGT on standardized achievement tests were found in four of seven other studies. Importantly, positive effects have also been found on measures of race relations, student perceptions of peer support, and mutual concern (Slavin and Karweit 1984).

INSTRUCTION SKILLS—MADELINE HUNTER

"Teaching is an applied science derived from research in human learning and human behavior: an applied science that utilizes the findings of psychology, neurology, and anthropology. The science of teaching is based on cause-effect relationships existing in three categories of decisions that all teachers deliberately make, intuitively or by default," states Madeline Hunter (1984, 171).

The Hunter Model developed during the 1970s has become very popular across the nation and in other countries. It has recently been endorsed by several state departments of education as their major staff development program. Potental trainers attend the UCLA training center to obtain certification in the Hunter Model. These certified trainers enthusiastically train others back home. What is the appeal of this program?

The appeal is not based upon research findings regarding the model's effectiveness, since the model has been validated in very limited situations; its appeal is in its sensible and orderly approach to classroom instruction. Hunter believes that teaching is a constant stream of professional decisions which affect the probability of student learning. These decisions are made and implemented before, during, and after interactions with students. Hunter's program provides teachers with a plan and structure for making these decisions.

The first category of decisions a teacher must make focuses on the content to be covered: What is the long range goal set by school districts or state mandates, parents, or teachers? What is the goal for tomorrow morning? In either case a task analysis must be conducted so that it will be clear how to meet the goals.

Another category of teacher decisions deals with what the student must do to learn and to reach the goal, for example, read, write, listen, observe, discuss, experiment, or cooperate with others. In this case the teacher must decide whether the lessons planned are appropriate, and monitor and adjust the activities as necessary. If the student is having difficulty, the teacher must decide whether to change the task or assist the student, using other procedures, to acquire the skills necessary for successful completion of the task.

After the teacher has made decisions about what content is to be learned and how the learner is to achieve the learning, decisions regarding teaching behaviors can be made. At this point the teacher can make choices affecting student motivation, the rate and degree of learning, the retention of learning, and the transfer of learning to new situations. Hunter believes that "the template of the three categories of decisions in teaching provides a common and defensible frame of reference by which teaching decisions and actions can be described, interpreted, discussed, evaluated, and improved" (1984, 175).

A second major component of the Hunter Model is implementing a basic lesson design. This design has seven elements believed to be generic to all subject areas and grade levels. The following briefly describes these elements:

1. **Anticipatory set.** Has the teacher developed in the students a mental set that causes them to focus on what will be learned? An anticipatory set may also give some practice in helping students achieve the learning and yield diagnostic data for the teacher. Example: "Look at the paragraph on the board. What do you think might be the most important part to remember?"
2. **Objective and purpose.** Not only do students *learn* more effectively when they know what they're supposed to be learning and why that learning is important to them, but teachers *teach* more effectively when they have that same information. Consequently, in words that are meaningful to the students, the teacher often states what will be learned and how it will be useful. Example: "Frequently people have difficulty in remembering things that are important to them. Sometimes you feel you have studied hard and yet you don't remember some of the important parts. Today, we're going to learn ways to identify what's important, and then we'll practice ways we can use to remember important things."
3. **Input.** Students must acquire new information about the knowledge, process, or skill they are to achieve. Regardless of whether that information comes from discovery, discussion, reading, listening, observing, or being told, the teacher must have task-analyzed the final objective to identify knowledge and skills that need to

be acquired. Only then can the input phase of the lesson be designed so that a successful outcome becomes predictable.

4. **Modeling.** "Seeing" what is meant is an important adjunct to learning. Usually, it is facilitating for the learners to directly perceive the process or product they are expected to acquire or produce. So that creativity will not be stifled or generalizability impeded, several examples should be a routine part of most (not all) lessons. Demonstrations, live or filmed, of process and products are facilitating rather than restricting to student initiative and creativity.
5. **Checking for understanding.** Before students are expected to do something, it is wise to ascertain that they understand what it is they're supposed to do and that they have the minimum skills required to do so. Sometimes this checking occurs verbally before actual student action. Sometimes it occurs simultaneously with the next element.
6. **Guided practice.** Students practice their new knowledge or skill *under direct teacher supervision*. New learning is like wet cement; it is easily damaged. An error at the beginning of learning can easily "set" so that it is harder to eradicate than had it been apprehended immediately.
7. **Independent practice.** Independent practice is assigned only after the teacher is reasonably sure the students will not make serious errors. After an initial lesson, students frequently are not ready to practice independently, and the teacher has committed a pedagogical error if unsupervised practice is expected. (p. 175–176)

A third component which makes the Hunter Model so attractive is an observation methodology which trainers, supervisors, or principals can use to give teachers feedback on how well they are using the basic lesson design and activities in the classroom. The evaluator, supervisor, or principal observes the teacher and makes an anecdotal record, or in Hunter terms, does script taping of what is observed. The observations are focused upon specific teacher and learner behaviors. Through the observations the following questions can be answered:

1. Are teacher and learner effort and energy directed to a learning objective?
2. Is the learning objective at the correct level of difficulty for these students?
3. Is the teacher monitoring students' learning and adjusting teacher and learner behaviors as a result of information revealed?
4. Is the teacher using principles of learning effectively?
5. How will the observer help the teacher continue to grow?

Another plus for the model is that supervisors and principals are given instruction on how to use the anecdotal records or script tapes to confer with teachers. During the conference, teachers not only receive information on what was observed, they also are encouraged to extend professional skills. During the conference any one or all of these strategies may be followed:

1. Identifying and labeling productive behaviors.
2. Developing productive alternative behaviors.
3. Analyzing one's own teaching.
4. Identifying areas that need improvement.

5. Identifying the next steps to promote the continuing growth of excellent teachers.
6. Evaluative conferences.

As good as the model sounds and as widely as it is used, it is surprising that so little systematic research has been conducted to examine the model's effectiveness in improving student achievement. One longitudinal study is underway in Napa, California. At the end of the second year of the study, a clear and strong relationship was found between the quality of the model implementation, student engaged rate, and achievement in reading and mathematics.

The proof of the value of the Hunter Model is in its wide use and in the commitment of those who have been trained to teach this model. In other words, where there is so much smoke, there must be a very hot fire.

IN CONCLUSION

What do you value for elementary school children? Certainly children will achieve more in a well ordered environment; Evertson and Emmer's book, *Classroom Management for Elementary Teachers*, will help accomplish order. Given the renewed focus on math and science and the need for better instruction at all levels of schooling, the Good and Grouws Missouri Mathematics Program holds great promise for improving math skills. Slavin's cooperative learning programs have also proven effective in improving math skills and social skills such as cooperation and mutual concern. For a more comprehensive overhaul of classroom instruction, you may want to consider Bloom's Mastery Learning, Hunter's Instructional Skills, or Stallings' Effective Use of Time.

In choosing an innovation, it is essential to consider what you are willing to commit to establish the program and then to institutionalize it. Effective Classroom Management in the Elementary School and the Missouri Mathematics Program can be reasonably installed and maintained using the books prepared by the researchers and the ASCD videotapes. One or two day workshops given by the researchers would most certainly be helpful in getting started, but not critical.

The other programs require more comprehensive changes on the part of the teachers, and thus require a more comprehensive training program. Several Mastery Learning program developers are available to provide trainers to school systems wishing to install a Mastery Learning program. Necessary to good implementation of Mastery Learning is a curriculum which is organized in short units and is amenable to frequent criterion testing which can determine mastery. The implementation of Mastery Learning will most likely require a revision of the grading system and how time is distributed; thus parents, students, and teachers will need orientation. To meet the goals of Mastery Learning of having 95 percent of the children in school succeeding at an 80 to 90 percent rate will require a commitment of several years, not a few weeks or a single school year.

Slavin's cooperative learning program requires materials suitable for use in small group cooperative activities. He has prepared sets of materials which can be used in games and tournaments. These are available and can serve as models for teachers to develop their own materials. Critical to the success of this model is the availability of appropriate activities for the teams. If preparing these materials becomes a burden for teachers, they will be much less likely to use these strategies. Slavin and his staff do conduct workshops to help teachers learn how to organize and facilitate small group team activities.

Both Hunter and Stallings have developed training programs which re-

quire an apprenticeship to become a trainer of trainers. In both cases candidates can receive training with the originators of the programs or from certified trainers located in various sections of the country. Both of these models require a series of workshops to initially train teachers, conduct observations, and give feedback to teachers. These models may be initially more expensive to install, but are more likely to be maintained over time.

There are many other excellent programs available to school districts, and I apologize if your favorite model has not been mentioned. Those that appear here are in considerable current use and are familiar to this author. In judging any elementary program or strategy, you might consider the following criteria:

What are the goals of the program?
What must change? Curriculum, time, attitudes?
What is required to implement? Books, materials, training?
How long will it take to install?
What will it take to maintain it?
How soon can we expect results?
What will it cost?
What are the chances that it will help develop teachers like the best elementary teacher that you ever had?

REFERENCE NOTES

1. **Findings from the Research on Teaching.** The most comprehensive review of the research on teaching can be found in Jere Brophy's chapter in the *Handbook of Research on Teaching, Third Edition.* This chapter covers all of the major works accomplished during the 1970s and up to 1983.

2. **Programs to Motivate Positive Student Behavior.** Two programs which reward good behavior and use peer pressure to achieve good behavior are Cantor's Assertive Discipline Training Program (Lee Cantor and Associates, 1553 Euclid Street, Santa Monica, CA 90404) and Jones' Classroom Management Training Program (Frederick H. Jones, 64 Alta Vista Drive, Santa Cruz, CA 95060). Another program which develops personal and group responsibility is Glasser's problem-solving approach described in *Schools Without Failure* (1969. New York: Harper and Row).

3. **Effective Elementary Programs.** A research based classroom management system developed by Evertson, Anderson, and Emmer helps elementary teachers organize and manage their classrooms at the beginning of the school year (C. Evertson, L. Anderson, and E. Emmer. 1980. Effective Management at the Beginning of the School Year. *Elementary School Journal 80,* 219-231).

   Good, Grouws, and Ebmeier of Missouri developed an excellent mathematics program. This lesson design includes a time for mental arithmetic in which children are challenged to think in their minds and solve problems (T. Good, D. Grouws, and H. Ebmeier 1983. *Active Mathematics Teaching.* New York: Longman).

4. **Effective Use of Time.** A remedial reading program for secondary students was developed by Stallings, Needels, and Stayrook. This program helps teachers and students use available time effectively (Effective Use of Time Training Program. Peabody Center for Effective Teaching, Box 34, Vanderbilt University, Nashville, TN 37203).

5. **Mastery Learning.** Bloom's *Human Characteristics and School Learning* (1976. New York: McGraw Hill) is one of the best books this chapter's author has read on the theory and belief regarding Mastery Learning.

6. **Cooperative Learning.** *Teams, Games, and Tournaments* by Robert Slavin is one of the most useful references describing how cooperative learning groups can be organized (*Using Student Team Learning.* 1980. Baltimore, MD: Center for Social Organization of Schools, The Johns Hopkins University).

7. **Instructional Skills.** Effects of Madeline Hunter's model are best described in Stallings, Robbins, Presbrey, and Scott, Under What conditions Do Children Thrive in the Madeline Hunter Model? A Report of Project Follow Through, Napa California, *Elementary School Journal,* in press. The program description can be obtained from Madeline Hunter, Increasing Teacher Effectiveness Training Program, University of California at Los Angeles.

EFFECTIVE ELEMENTARY SCHOOLS

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"Your school can become more effective." This is the promise of the effective schools research. During the past few years, educators have been hearing about schools in which children achieve at levels much higher than expected. Studies indicate that there are several common characteristics which these effective schools share. Furthermore, there is a growing movement among schools, school districts, and states to emulate these characteristics in the hope of improving student achievement.

This healthy optimism about school effectiveness is in marked contrast to the disappointing results from many previous school studies and to the apparent erosion in the public's confidence in our schools during recent years. When researchers began to look for successes, effective schools were relatively easy to find. The study of these schools, along with major advancements in research on effective instructional practices, provides guidance for improving education and meeting the demands for educational reform.

This chapter will examine both the promises of school improvement, based on findings from the research on instructionally effective schools, and the pitfalls of any wholesale application of such findings. It will illustrate that there is no single formula for creating an effective school. The exact mixture of "ingredients" for making each school successful may be unique. Rather than providing a recipe for school excellence, this chapter will convey a set of questions to ask about any school improvement project, and will suggest important ways in which to examine the elements of instructional management at the elementary level.

PRESCRIPTIONS FOR SCHOOL EFFECTIVENESS AND THEIR PITFALLS

Studies of successful schools consistently describe five common characteristics:

- a school climate conducive to learning—one free of disciplinary problems and vandalism;
- the expectation among teachers that all students can achieve;
- an emphasis on basic skills instruction and high levels of student time-on-task;
- a system of clear instructional objectives for monitoring and assessing students' performances;
- a school principal who is a strong programmatic leader and who sets school goals, maintains student discipline, frequently observes classrooms, and creates incentives for learning.

At the school level, considerable attention is given to the role of the principal as instructional leader. One observer wrote, "One of the most tangible and indispensable characteristics of effective schools is strong administrative leadership, without which the disparate elements of good schooling can neither be brought together nor kept together." (Edmonds 1979) The principal is seen as the manager of excellence. Effective schools have effective principals.

Research on effective administration and successful schools points to several distinguishing elements of principal leadership.

1. **Goals and Production Emphasis.** Effective principals are actively involved in setting instructional goals, developing performance standards for students, and expressing the belief that all students can achieve.
2. **Power and Decision Making.** Effective principals are more powerful than their colleagues, especially in the areas of curriculum and instruction. They are also seen as leaders in their districts and are effective in maintaining the support of parents and the local community.
3. **Management.** Principals in effective schools devote more time to the coordination and management of instruction and are more skilled in instructional matters. They observe their teachers at work, discuss instructional problems, support teachers' efforts to improve, and develop evaluation procedures that assess teacher and student performance. An important part of their leadership role is setting standards, clarifying program and curricular objectives, and sustaining schoolwide improvement efforts.
4. **Human Relations.** Effective principals recognize the unique styles and needs of teachers and help teachers achieve their own performance goals. They instill a sense of pride in the school among teachers, students, and parents.

Few individuals would disagree with the desirability of these characteristics. The effectiveness traits are not unique to schools and to principals. Studies of business, the military, and other organizations also show that successful managers exhibit these same characteristics.

Like most research, however, the findings listed above are not unambiguous or unequivocal when examined closely. A number of troubling questions arise when one tries to apply the prescriptions of the effective schools research. For example, if an effective school is characterized by high expectations for its students, how high should those expectations be? Should they be set at grade level or above? Should all children be held to the same standard? Research on motivation, as well as common sense, indicates that effort may decrease when standards are set too high, just as achievement may decrease when standards are too low. The research does not specify at what level expectations should be set or how they can be communicated effectively.

Effective schools emphasize the basic skills. But how much time should be devoted to elementary decoding and numerary tasks? What about important reasoning and social skills? Most schools have goals that go beyond basic skills learning. In addition, some research has shown that too much time spent on basic tasks can detract from the higher-order thinking capacities necessary for success in the secondary grades. The most productive balance of various skill tasks is never described by this research.

Effective schools have strong principals. But teachers in effective schools also have high levels of autonomy so that they can provide instruction appro-

priate to the immediate needs of their students. How are strong leadership and autonomy managed simultaneously?

These dilemmas arise from the studies on effective schools largely due to limitations of the research designs. Several problems have plagued this research. First, it is correlational. That is, after a small number of effective schools are identified, researchers catalog school characteristics, hoping to find a list of shared factors among the schools. This *post hoc* method cannot readily distinguish those factors which caused the schools to be effective from other inconsequential, but shared, items. Nor can these studies chart how important factors shaped the schools' successes, because the process of becoming successful is never studied. For example, many principals feel that their management styles change as their schools become more effective. Therefore, as a set of recipes for helping schools becomes more successful, the research findings can only be suggestive.

Second, the research on effective schools has been conducted in only a limited number of public schools. Most of the studies focus on small, urban elementary schools which have low proportions of racial minority children. This raises the question of whether such findings can be generalized. Can these effective school factors be replicated in other contexts?

Third, the research has used a very circumscribed definition of effectiveness, and the techniques used to select effective schools are unreliable. Usually, effectiveness is defined by a school's *average* level of achievement on standardized basic skills tests. Schools are considered effective if they score higher *than expected* given the socioeconomic status of their students. In other words, two schools which have identical average achievement scores may not be equally effective. This definition of success is unstable. The likelihood of a school being successful for two consecutive years is nearly 50 percent—not much better than pure chance.

Moreover, other important goals which schools have are never assessed. The studies never examine problem-solving, social, or other schooling outcomes. In fact, most effective school studies use only *one* achievement score at *two* grade levels (for example, reading in the third and sixth grades) to measure effectiveness. Therefore, there is no guarantee that schools identified by this technique are also excellent in attaining all, or even most, of the important goals set by schools at all grade levels. Emulating the characteristics of so-called effective schools may deflect improvement in other areas of instruction.

These problems do not suggest that findings from the effectiveness research should be ignored in improvement efforts. The cumulative evidence, as well as the practical experience of educators, supports the importance of having high expectations for students, developing a positive school climate, improving instruction, and demonstrating leadership. These are necessary, but probably not sufficient, elements for school improvement. Creating effective elementary schools is not like baking a tasty pastry or erecting a sturdy house. Recipes and blueprints for making a school more effective have not been developed.

INSTRUCTIONAL MANAGEMENT

Although there is no single model for school improvement, essential elements of instructional management can be identified when the successful schools findings are merged with the results from recent research on effective instruction. If instruction is conceived of as the essential mission of the school, research on instructional effectiveness provides some hints concerning manipulable factors for school success. The following elements seem to affect student learning.

1. **Time-on-task.** Studies show that the amount of time a student is engaged in a learning activity affects achievement, and that teachers can be trained in classroom management practices that increase students' engagement rates. However, engaged time may be less important than "success rate"--the proportion of engaged time in which students actually master the assigned task. Higher success rates produce higher motivation and achievement.
2. **Class size and composition.** Smaller classes do produce higher average achievement scores, especially when class size is reduced to below 20 students. Yet, decreasing size does not always guarantee improved instructional opportunities for children. Without adequate inservice training, teachers may simply teach in the same fashion even when class size is reduced. Recent research indicates that the overall achievement distribution within a classroom significantly affects learning.
3. **Grouping for instruction.** Although there is some disagreement concerning the effects of various grouping practices, especially when children are separated by ability, studies show that the size of instructional groupings within a class affects pupil achievement. Instruction in large or small groups may not affect learning of basic skills concepts, but higher-order thinking skills are best promoted in small group activities. Also, the extent to which instructional tasks are differentiated among groups affects learning. Student motivation and task engagement, especially among some ethnic minorities, may be fostered in learning centers and multi-task learning environments.
3. **Curriculum.** Examinations of the curriculum show that the pacing, sequencing, and content coverage of classroom lessons influence both individual student's achievements and the distribution of performance within a classroom. Generally, students who receive instruction paced at a higher level (for example, more new basal words each week) also score higher on standardized reading tests. Moreover, as time-on-task is increased, concomitant increases in material density (such as new words and concepts) must occur so that tasks do not become unnecessarily repetitive and do not depress student motivation and achievement.
5. **Evaluation.** Although there is some concern about the effectiveness of teacher praise, the nature of feedback and its uses have been shown to affect children's learning. Prompt and prescriptive evaluation of assignments and homework stimulates motivation and retention. Elements of the classroom's performance structure which define the number of performance options for children also are important. Classrooms which provide only one or two ways to demonstrate learning (as in tests or recitation performance) may overlook certain learning styles, limit opportunities to demonstrate competence, and depress task engagement.
6. **Task Characteristics.** The nature of the instructional task, especially students' perceptions of its clarity, and requirements for problem solving, affects student learning. Often, students' "inappropriate" learning strategies and their poor performance are caused by teachers' insensitivity to the children's understanding of the activity.

Moreover, if tasks are too complex and require extensive organization time, student learning decreases.

Good teachers seem to know, plan, and construct their classrooms and lessons using these six factors. Although these factors operate primarily at the classroom level, it is easy to see how school-level management can affect these elements. Analyzing how policies and practices, at various organizational levels within school systems, actually shape what teachers and students can accomplish leads to the "multi-level" perspective. Researchers are beginning to chart how certain organizational and management variables at the school, district, and state levels facilitate or hinder the effective classroom instructional practices listed above. For *school-level management,* consider the following factors.

Time

Even at levels far-removed from classroom time-on-task, time allocations influence students' achievements. For example, variations among schools in the number of calendar days in the school year, especially when combined with average absentee rates, have a significant effect on student achievement. While more school days and longer school hours may provide increased opportunity to learn, the use of time within schools and classrooms is most important.

At the school level, there are numerous things that can determine instructional time in classrooms. Schools have yearly, weekly, and daily cycles that specify not only how much time can be allotted to instruction in various curricular areas but also when evaluations and tests must be given before students can progress to new subjects and materials. Housekeeping, reporting requirements, transition time needed for special classes, and other tasks may seriously cut into students' time-on-task. The degree of coordination within the school may heighten or lessen interruptions of classroom lessons. For example, pull-out programs for children with learning problems can fragment a child's day, interrupt important practice time provided in the regular classroom, and thus perpetuate a child's underachievement unless the program is carefully coordinated with regular classroom activities.

Studies of managers in business and industry demonstrate that successful managers *"buffer"* their workers during key production periods in order to guarantee maximum efficiency. Although schools are not factories, school principals can be mediators of organizational and environmental forces that determine the amount of engaged time and student productivity. For example, the principal's role as disturbance handler, as school gatekeeper, and as middleman in disputes between parents and teachers buffers classrooms from disturbances that can interrupt the flow of instruction. Principals can guarantee that all classrooms have the resources necessary to carry out the school's instructional goals so that teachers do not have to use valuable class time securing needed materials.

Class size and composition

Size and composition have important consequences for the ways teachers teach. Although a school's overall makeup and staff allocations usually are not controlled by the principal, internal assignments of teachers and students can make a large difference in the climate and instructional effectiveness of classrooms and the entire school. Often such assignments bear little relationship to the learning needs of students and the instructional skills of teachers. For example, many principals and teachers feel that it is desirable to disperse students with behavioral problems equally among classes. But when this is done with-

out consideration of the overall composition of classrooms, teachers may be forced to construct unproductive reading and math groups in order to accommodate the behavior problems.

This one-time-only decision about the assignment of teachers and children affects the learning experiences and achievements throughout the year. Successful principals carefully construct classroom groupings so that a productive match is made between students' learning needs, teachers' objectives, and teaching approaches.

Grouping

Once class assignments are established, teachers face major decisions about the use of whole group and small group instruction. In the active process of managing multiple groups or directing whole class discussions, teachers find it difficult to assess the positive and negative effects of their grouping arrangements. Whatever the grouping strategy employed, an obvious instructional supervision role that principals can play is in helping teachers evaluate how well their grouping systems are working. For example, systematic observations by the principal (or a peer) can disclose if initial group placement is accurate, if certain groups and individual students receive disproportionate attention, or if children are "locked into" certain groups without opportunities to display their increased achievement.

Curriculum

Many school-level decisions about the curriculum shape what and how much students learn. Textbook choices, for example, may largely determine the pace of instruction, and hence the level of performance students attain. One study of first grade reading groups found that identical groups of children were exposed to very different amounts of material. One group learned about two new basal words each day, whereas another group learned nearly five new words with equal success. When questioned about the differences in curriculum pacing, the teachers referred to the guidelines supplied by the textbooks. Therefore, "hidden" in textbook choices are pacing decisions that affect what and how much students learn. Principals and teachers can work together to assess curricular materials, not simply for the adequacy of content but also for appropriate difficulty and pacing dimensions.

Another area of school-wide curricular management that is usually not systematically addressed concerns the articulation of the curriculum across grades. For example, in schools that have numerous programs for children with special needs, principals can play a crucial role in assisting teachers to coordinate the programs with regular classroom activities. When there is lack of coordination, some children may experience a fragmented instructional program, and may not be provided opportunities to practice and accomplish the various learning tasks they are assigned. For example, sending some students to remedial reading during guided spelling practice may guarantee that these students will continue to fail in spelling. Often the competing demands of regular and special program teachers need to be addressed by the school principal, and not simply in terms of the teachers' convenience.

Evaluation

School policies on testing and grading can affect instruction and learning. Prompt feedback on student assignments, especially homework, seems to enhance motivation and achievement. Public recognition of special performance can bolster a school's confidence and students' expectations. These are domains where the school principal can exercise leadership.

Likewise, routine evaluation of teachers' instructional practices by the

principal may help identify problems and reinforce school-level instructional goals. Most teachers value constructive criticism of their teaching, especially when it is linked to objective and shared observations of their work. Moreover, the typical isolation of teaching in individual classrooms can foster divergent instructional practices despite apparent agreement on school goals. If teachers in successful schools share a common value and practice orientation, then school-level management can help ensure that this is expressed in day-to-day classroom activities.

Task Characteristics

A school-wide analysis of task demands inherent in classroom instructional practices can disclose the continuities and discontinuities experienced by children. For example, a school-wide commitment to developing self-directed learning skills among children can be undone if teachers in certain grades do not provide opportunities for children to exercise some choice and control over their learning.

The "hidden curriculum" in activities prescribed by textbooks can convey messages that conflict with overall school goals. For example, excellent curricular content on multicultural education, designed to overcome racism and gender stereotyping and to foster cooperative behavior, can be subverted by prescribed competitive learning games and activities.

Discontinuities in task demands also can arise in pull-out and special education programs when regular classroom teachers and resource teachers employ different and seemingly contradictory learning approaches. This can confuse children, depress their motivation to learn, and instill mechanical learning strategies to accommodate conflicting demands. School-wide coordination and management can guarantee that skill objectives are clearly communicated throughout the instructional program and that learning experiences are cumulative.

These examples do not exhaust the ways in which school-level and classroom-level instructional management mesh. But they do point out that school-level decisions, policies, and practices can greatly shape students' learning experiences. There is no blueprint for the "best way" to organize the instructional program in all schools. However, it seems clear that every school and classroom must address the same issues of time, class size and composition, grouping, curriculum, evaluation, and tasks. These are the "ingredients" of all schools. Effectiveness is determined by the way schools coordinate and manage these elements.

LEADERSHIP

The challenge for school-level leadership is not necessarily to import or invent new methods and procedures for instructional supervision. Rather it is to search for the connections between the basic instructional elements that all schools address and management strategies that guarantee a context for effective teaching and learning. Principals should focus on the potent factors outlined above and manage their schools accordingly. But the question still arises, *how* do they do it?

One of the most detailed investigations of the instructional leadership role of principals is being conducted by the Instructional Management Program at Far West Laboratory for Educational Research and Development. Using detailed interviewing and ethnographic observation techniques, members of this team have begun to analyze the management activities of elementary school principals.

The research indicates that there is no single formula for instructional leadership. Some principals exemplify the "master teacher" role. They are ac-

tive in preparing and demonstrating instructional techniques for their teachers. They spend many hours in classrooms, interacting with the children and suggesting solutions to instructional problems. (See Figure 1.) Other principals are less obvious in their instructional management. Their visits to classrooms are short in duration, usually momentary visits to deliver a message or check on an administrative detail. These principals seem to influence teaching practices indirectly. Often they plant an idea with a teacher leader and make sure that resources are available to foster the implementation of the idea so that it will spread to other teachers in the school. (See Figure 2.)

In analyzing the differences among these principals, the researchers suggest that there are important personal and contextual factors which shape how a principal manages a school. One such factor may relate to characteristics of the teaching staff. When a staff is highly experienced and professionalized, more indirect leadership techniques are employed by school principals. Whereas, when a staff is largely inexperienced or "under fire" by community and district criticism to improve instruction, more direct supervision and management are desirable.

The need for different leadership styles is reinforced by research in other organizational contexts. A single method for leadership will not apply in all situations. This is called a "contingency approach" to administration. Administrators who recognize the importance of this approach also realize that their own leadership styles vary over time and in response to the exigencies of management within their organizations.

Yet despite differences in management behavior, there are certain commonalities among the principals studied. One common factor pertains to the principals' *visibility* in their schools. Usually, the principals begin each day by roaming their buildings and greeting children and staff as they arrive. As classes begin, they return to their offices for short planning meetings with assistants or to resolve student problems. But shortly, they are back out into the hallways and classrooms to monitor events and communicate with their staff and the students. The principals are systematic about observing, and being seen, in just about every locale and context within their schools—hallways, classrooms, recesses, libraries, and lunchrooms. Afternoons bring these principals back to their offices to handle student problems, paperwork, and parents.

This daily cycle serves a basic maintenance function for the school. It allows principals to assess the working status of their organizations and circumvent minor difficulties before they become major problems. If "buffering" is a key to good management, systematic tours of their schools provide the principals with essential information to execute this function.

A second common characteristic of these principals is that this daily cycle and the information gathered during tours are consciously linked to improving instruction within their schools. Each of the principals clearly articulates direct and remote links between their actions and their schools' instructional systems. It appears that successful principals always ask themselves how a particular decision will affect the learning environment within their schools and classrooms. Although each principal expresses his or her own instructional philosophy, the elements of that guiding philosophy are strikingly similar to the factors that derive from effective teaching research. These principals are concerned with engaged time, class composition, grouping arrangements, curriculum pacing and articulation, student evaluation, and the task demands. They analyze and work with their teachers to guarantee that school activities reinforce, rather than detract from, their classrooms' instructional programs.

Therefore, instructional leadership does not mean doing something new, highly visible, or especially time-consuming. Rather it means systematically

Figure 1

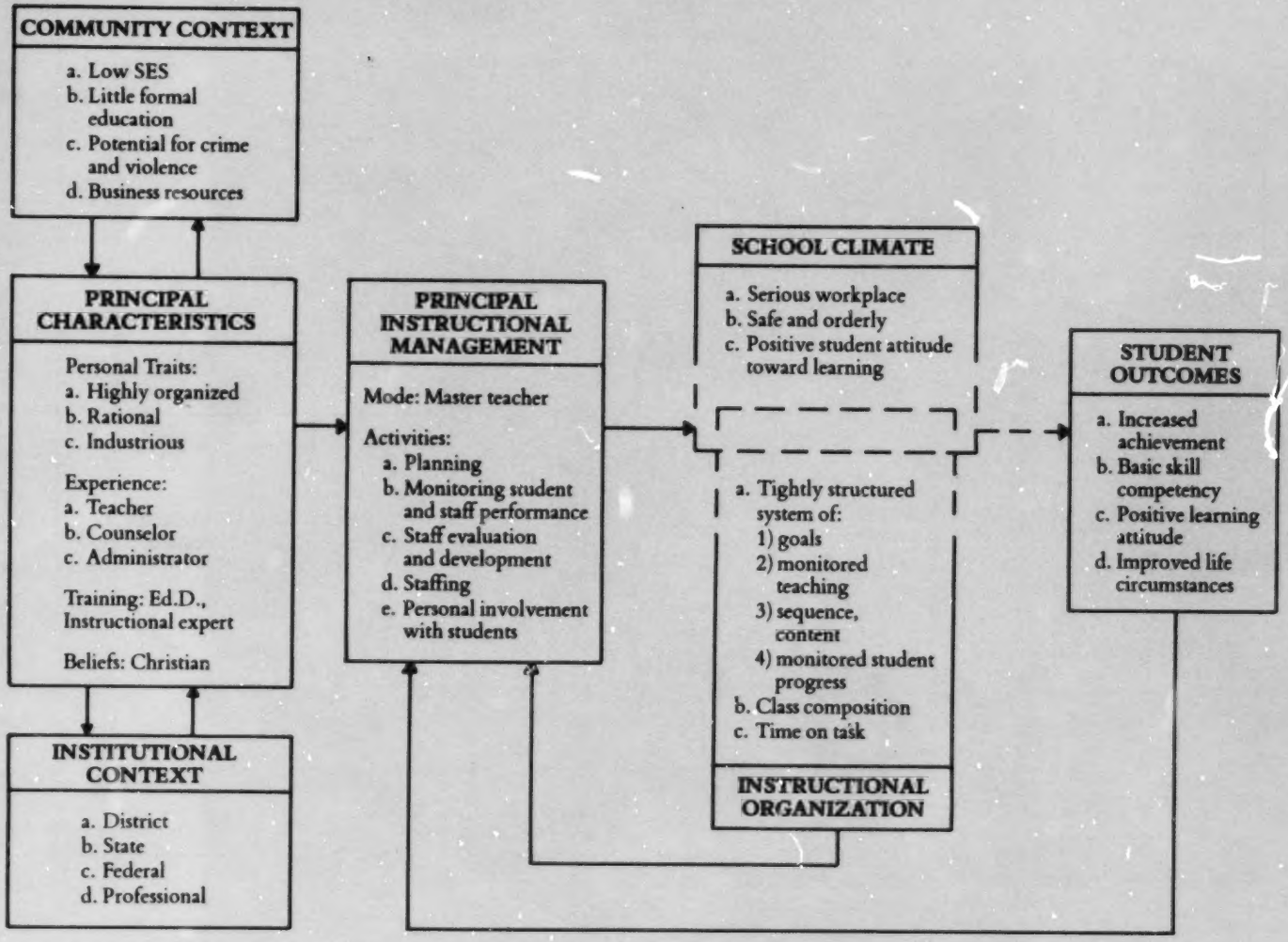
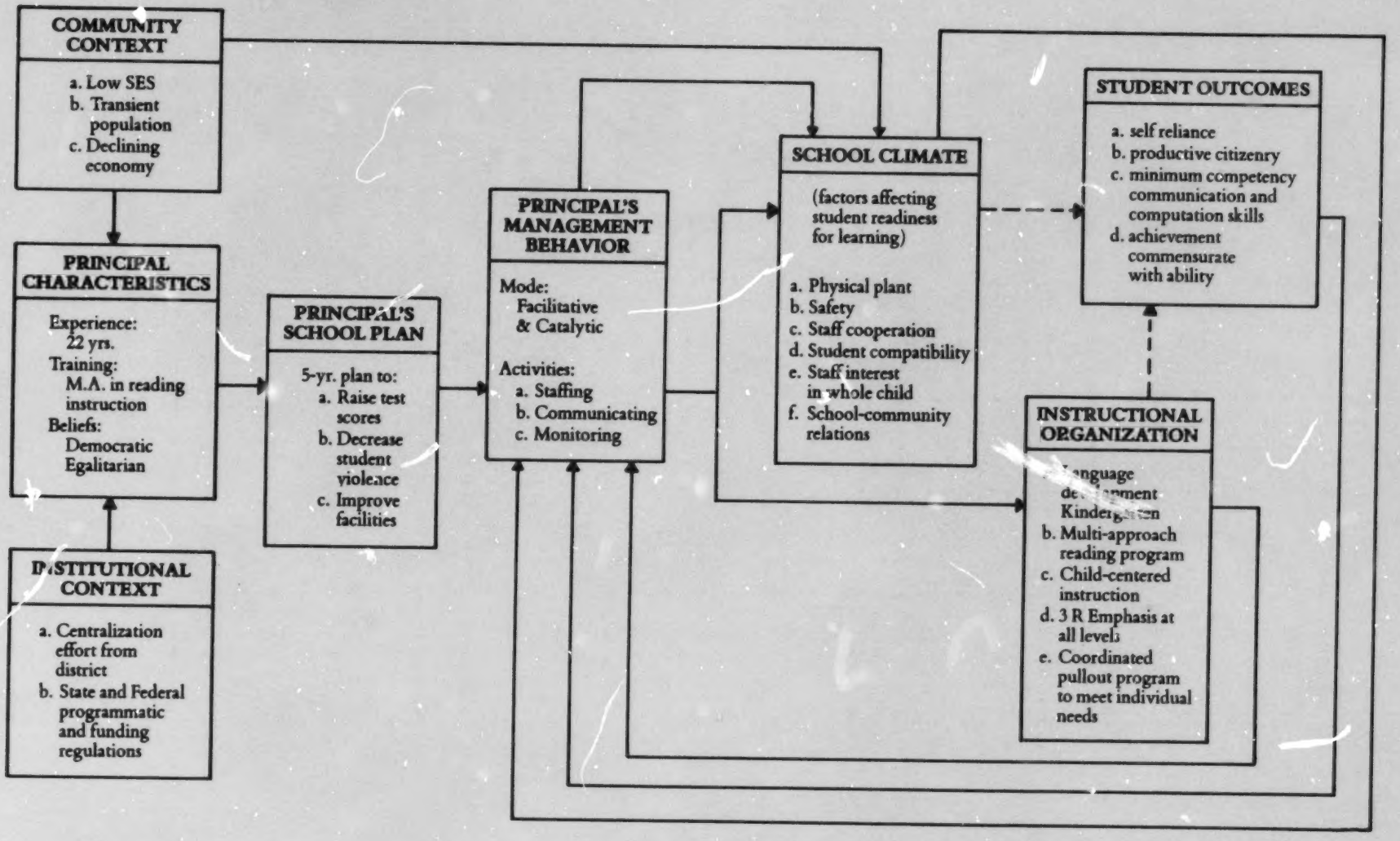

COMMUNITY CONTEXT
a. Low SES
b. Little formal education
c. Potential for crime and violence
d. Business resources
PRINCIPAL CHARACTERISTICS
Personal Traits:
a. Highly organized
b. Rational
c. Industrious
Experience:
a. Teacher
b. Counselor
c. Administrator
Training: Ed.D., Instructional expert
Beliefs: Christian
INSTITUTIONAL CONTEXT
a. District
b. State
c. Federal
d. Professional
PRINCIPAL INSTRUCTIONAL MANAGEMENT
Mode: Master teacher
Activities:
a. Planning
b. Monitoring student and staff performance
c. Staff evaluation and development
d. Staffing
e. Personal involvement with students
SCHOOL CLIMATE
a. Serious workplace
b. Safe and orderly
c. Positive student attitude toward learning
a. Tightly structured system of:
1) goals
2) monitored teaching
3) sequence, content
4) monitored student progress
b. Class composition
c. Time on task
INSTRUCTIONAL ORGANIZATION
STUDENT OUTCOMES
a. Increased achievement
b. Basic skill competency
c. Positive learning attitude
d. Improved life circumstances

Figure 2


COMMUNITY CONTEXT
a. Low SES
b. Transient population
c. Declining economy
PRINCIPAL CHARACTERISTICS
Experience: 22 yrs.
Training: M.A. in reading instruction
Beliefs: Democratic Egalitarian
INSTITUTIONAL CONTEXT
a. Centralization effort from district
b. State and Federal programmatic and funding regulations
PRINCIPAL'S SCHOOL PLAN
5-yr. plan to:
a. Raise test scores
b. Decrease student violence
c. Improve facilities
PRINCIPAL'S MANAGEMENT BEHAVIOR
Mode: Facilitative & Catalytic
Activities:
a. Staffing
b. Communicating
c. Monitoring
SCHOOL CLIMATE
(factors affecting student readiness for learning)
a. Physical plant
b. Safety
c. Staff cooperation
d. Student compatibility
e. Staff interest in whole child
f. School-community relations
INSTRUCTIONAL ORGANIZATION
b. Multi-approach reading program
c. Child-centered instruction
d. 3 R Emphasis at all levels
e. Coordinated pullout program to meet individual needs
STUDENT OUTCOMES
a. self reliance
b. productive citizenry
c. minimum competency communication and computation skills
d. achievement commensurate with ability

linking everyday management activities to the critical factors that support excellent instruction within all classrooms in the school.

However, it is inaccurate to say that instructional leadership falls solely on the shoulders of the school principal. Teachers share an equal responsibility for assessing and contributing to the overall instructional program within their schools, rather than protecting the needs of their own classrooms. Research on effective staff development clearly indicates that effective schools are characterized by "norms of continuous improvement." This simply means that school improvement is viewed both as an ongoing process and as a collective responsibility shared equally among all teachers in the school. When this exists, there is greater experimentation, less isolation of inexperienced teachers, stronger collegiality and joint problem-solving, reduced teacher absenteeism, and increased demands for effective inservice training.

These findings bolster the notion that effective program implementation requires a shared sense of commitment among a school's staff, collegial support, involvement in planning and assessment, a sense of ownership in the project, and administrative support.

The balance between strong administrative leadership and teachers' professional autonomy lies in a particular view of the function of school leadership. Effective leadership helps a school's staff articulate shared values, goals, and approaches to school improvement. But it also involves developing the conditions in which these can be realized. The instruments that foster improvement do not necessarily require the adoption of entirely new models of instruction or supervision. Effective school-level management involves knowing how to link the already present elements of good instruction into school-wide policies and activities that support effective classroom practice.

EFFECTIVE SCHOOLS PROJECTS

Currently, there are many school improvement and reform projects that are building on the findings from the effective schools studies. Recent estimates indicate that schools in just about every state have some type of school improvement activity underway which can be labeled an effective schools project. It is important to ask a number of questions about these projects. How do they build on the effective schools and instruction research? What school-level factors do they identify for change, and how do they attempt to alter these? What are their successes and failures?

Many of the improvement efforts are difficult to assess because detailed descriptions are not widely available and few have been adequately documented or evaluated. The effective schools implementations, like many other areas in education, rely on an "oral tradition" which makes assessment and replication of the craft of improvement problematic. For purposes of illustration, two improvement projects are reviewed here: Milwaukee's Project RISE and New York City's School Improvement Project. They represent typical improvement approaches and are among the best publicly documented projects to date.

Milwaukee's Project RISE

Begun in 1979 with the mandate to improve student achievement in 18 elementary and 2 middle schools, Project RISE embodied three assumptions: that all students, regardless of family background, can acquire the basic skills; that low expectations and inappropriate teaching practices cause poor achievement; and that changing expectations and policies could improve learning. Project members targeted eight factors to implement in school programs:

1. a belief among teachers and students that all students can learn and that it is the school's responsibility to ensure achievement;
2. an academic emphasis through the school;
3. high levels of professionalism and collegiality among school staff;
4. a strong sense of student identification with the school;
5. the establishment of grade level standards for student performance in reading, math, and language;
6. a focus on teaching students who perform substantially below grade level;
7. the use of "active" teaching techniques in order to improve students' time-on-task;
8. more structured learning environments.

The project's clear focus was on the classroom instructional system—improving expectations and increasing the quantity and quality of learning time for students. RISE schools developed grade-level objectives and charted students' performance against these standards. This provided clear guidelines for planning and student promotion. One result was that RISE schools dropped the district's ungraded primary approach and substituted a standardized age-graded class system.

RISE schools generally showed a significant improvement in math achievement and some increases in reading. Much of the achievement gain in mathematics can be attributed to comprehensive inservice training given to a committed group of Title I math teachers, who then modeled effective teaching strategies during math instruction. However, the inconsistent achievement effects throughout the RISE schools, for all students and subject areas, call into question the value of simply raising standards. Stating that all teachers are responsible for student achievement and establishing grade-level standards cannot guarantee that every teacher will be able to improve classroom instruction. Without an integrated effort across grade levels and curriculum areas, "pockets of success" may develop while sustained school-wide improvement lags.

Milwaukee's program demonstrates that when clear instructional objectives are developed and when effective instruction training is provided *some* teachers will enhance the learning opportunities for their students, but uniform school-wide improvement is not guaranteed. Improving the expectations, skills, and techniques of classroom teachers is important for making schools more successful, yet classroom instruction is only one element in the complex improvement process that involves coordination and management of instruction throughout the school.

New York City's School Improvement Project

New York City's effectiveness project (SIP) was directly influenced by the research on successful schools. An improvement team focused on five factors:

1. strong administrative leadership;
2. orderly school climate;
3. emphasis on the basic skills;
4. high expectations for student achievement;
5. monitoring of student progress.

In order to comply with state requirements for school-based planning, the improvement effort at each school involved a planning committee consisting of parents, teachers and administrators.

Initially, 10 of 43 applicant schools participated in the first year. Participation was voluntary, and the schools' needs matched SIP priorities. Over half of the students in these schools came from low income homes, and most were from racial minorities. Between 20 to 61 percent of the children in each school were reading at or above grade level. Additional schools were added to the project in subsequent years.

Overall, 8 of the 10 first year schools developed improvement activities that were rated successful by the principals, teachers, and parents. SIP schools showed greater increases in reading achievement when compared to other schools. However, achievement gains were not sustained into the third year of the improvement program.

Evaluators report that the improvement projects in each school covered a wide array of activities. Schoolwide reading programs, improved assessment techniques for monitoring student performance, inservice activities focused on effective reading and math teaching, development of student handbooks and discipline codes, and student recognition programs are examples of some of the efforts included in the SIP. Principals were the key to successful implementation. If they were active in improvement efforts, monitoring results and spearheading inservice training where needed, the projects succeeded.

One of the major lessons learned from New York's SIP is that staff readiness for and commitment to the project are essential for success. Two of the original ten schools did not begin an improvement effort because the staff could not develop common goals. Of course, this is common knowledge. Implementation studies consistently show that teacher, principal, and district office support and agreement are essential for undertaking any systematic improvement effort.

As a model for improvement, however, the SIP is unclear. Its major emphasis is on local-building improvement teams. In addition although the teams may have discussed the five effectiveness factors that provide the basis for the program, it is not known how each school addressed each issue. For example, did all of the SIP schools develop similar activities to foster high expectations for students? It seems quite possible that similarities and differences existed among the improvement activities developed for each factor. If different activities were implemented, why were they chosen and what were their effects? The value of local, school-based planning is that it encourages staff and parents to adapt improvement programs to meet the special needs of their children. But as a general model for improvement, it demands that teachers, principals, and parents create anew the activities and mechanisms for achieving success.

The Milwaukee and New York City projects show that research findings can be an effective stimulus for improvement efforts. Focusing teachers' attention on the basic skills, increasing time-on-task, developing shared decision-making structures, fostering principal leadership, and rewarding high scholastic performance are important ingredients of good schools. On the other hand, prescriptions for effectiveness are far from complete. As one former school superintendent and observer of the effective schools movement put it, road signs exist but no one has a map that charts the road to school success.

ANALYZING SCHOOL IMPROVEMENT EFFORTS

The effective schools research is just the beginning of a new wave of improvement and reform efforts. Because Americans value education so highly and because education is an essential part of modern society, schools will always face the criticism that they are not meeting our expectations. Advances

in technology and information, as well as changes in the social structure, will continue to place new demands on schools and leave educators scrambling to adjust schooling practices to accommodate our changing world.

For these reasons, there will be new recipes and blueprints for school change. While some will provide new insights into educational improvement, others will simply reflect popular fads or political rhetoric. Therefore, elementary school principals and teachers must adopt a healthy skepticism about improvement efforts. This skepticism is embodied in the question that underlies the "multi-level" perspective on school organization: How do school-level policies affect the potent classroom-level instructional practices which provide opportunities for children to learn?

To date, research has only begun to identify these essential instructional elements. They include instructional time, class size and composition, grouping practices, curriculum pacing, articulation, and content, evaluation, and task characteristics. These are the building blocks of effective schools. Good teachers understand how these components operate in their classrooms, and successful principals orient their school-wide instructional management to these factors.

Although there is no single formula for combining these ingredients into a successful school program, it is important to assess how any school improvement project addresses these issues. For example, if a project involves adopting a new, uniform textbook series for reading, how does this series affect curriculum pacing and articulation across grade levels? Does it actually sustain or improve exposure to new basal words, or is its material density less than the seemingly fragmented reading texts used before? Is enough time allocated for specified skill lessons, and what is the success rate in prescribed tasks for different students? How much flexibility in instructional grouping is allowed? How adequate are evaluation methods for assessing specified skills? Are task demands clearly described in terms that the children can understand? Do prescribed tasks and curriculum content reinforce or undermine valued social skills? And, what school-level management structures and resources are necessary to support successful classroom use of the textbook series?

These questions do not exhaust the concerns which teachers and principals must address. But they do point out that school and classroom management issues are ultimately intertwined with certain basic elements of instructional organization. Instructional leadership and school improvement begin with a solid knowledge about effective teaching practices and proceed with the search for ways to support these in the day-to-day operations of the school.

REFERENCE NOTES

1. **Reviews and Studies of School Effectiveness.** There are numerous reviews of the effective school studies. The most informative are by S.T. Bossert, D.C. Dwyer, B. Rowan, and G. Lee, 1981, The Instructional Management Role of the Principal, *Educational Administration Quarterly, 18,* 34-64, and by S.C. Purkey and M.S. Smith, 1983, Effective Schools: A Review, *Elementary School Journal 83,* 427-453. Some of the original studies include the following: W.B. Brookover et al., 1979, *School Social Systems and Student Achievement: Schools Can Make a Difference,* New York: Praeger Publishers; R.L. Venezky and L. Winfield, 1979, *Schools That Succeed Beyond Expectations in Teaching Reading,* Technical Report #1, Department of Educational Studies, University of Delaware; G. Weber, 1971, *Inner City Children Can Be Taught to Read: Four Successful Schools,* Occasional Paper #18, Washington, DC: Council for Basic Education; J.B. Wellisch et al., 1978, School Management and Organization in Successful Schools, *Sociology of Education 51,* 211-226.

2. **Research on Instructional Effectiveness.** For an excellent review of research on effective teaching practices, see the *Elementary School Journal*, 1983, *83*. **On Time:** C.W. Fisher et al., Teaching Behaviors, Academic Learning Time, and Student Achievement: an Overview, in C. Benham and A. Lieberman, eds., 1980, *Time to Learn*, Washington, DC: Department of Education; J. Stallings, 1980, Allocated Academic Learning Time Revisited, or Beyond Time on Task, *Educational Researcher 9*, 11-16. **On Size and Composition:** G.V. Glass and M.L. Smith, 1979, *Meta-Analysis of Research on the Relationship between Class-Size and Achievement*, San Francisco: Far West Laboratory for Educational Research and Development; N.N. Filby et al., 1980, *What Happens in Smaller Classes?* San Francisco: Far West Laboratory for Educational Research and Development; T. Beckerman and T.L. Good, 1981, The Classroom Ratio of High- and Low-Aptitude Students and Its Effect on Achievement, *American Educational Research Journal 18*, 317-328. **On Grouping:** R. Calfee and R. Brown, Grouping for Instruction, in D. Duke, ed., 1979, *Classroom Management: The 78th Yearbook of the National Society for the Study of Education*, Part III, Chicago: NSSE; P.L. Peterson, L.C. Wilkerson, and M. Hallinan, eds., 1984, *The Social Context of Instruction: Group Organization and Group Processes*, New York: Academic Press; P.L. Peterson and T.C. Janicki, 1979, Individual Characteristics and Children's Learning in Large-Group and Small-Group Approaches, *Journal of Educational Psychology 71*, 677-687; S. Rosenholtz and C. Simpson, 1984, The Formation of Ability Conceptions: Developmental Trend or Social Construction? *Review of Educational Research 54*, 31-64. **On Curriculum:** R. Barr, 1975, How Children Are Taught to Read: Grouping and Pacing, *School Review 83*, 479-498; U. Dalhoff, 1971, *Ability Grouping, Content Validity, and Curriculum Process Analysis*, New York: Teachers College Press. **On Evaluation:** J.E. Brophy, 1981, Teacher Praise: A Functional Analysis, *Review of Educational Research 51*, 5-32; J.H. Block and B. Burns, Mastery Learning, in S. Shulman, ed., 1977, *Review of Research in Education*, Itasca, IL: Peacock; J.E. Brophy and T.L. Good, 1974, *Teacher-Student Relationships: Causes and Consequences*, New York: Holt, Rinehart and Winston; S.T. Bossert, 1979, *Tasks and Social Relationships in Classrooms: A Study of Instructional Organization and Its Consequences*, New York: Cambridge University Press; S. Rosenholtz and B. Wilson, 1980, The Effect of Classroom Structure on Shared Perceptions of Ability, *American Educational Research Journal 17*, 75-82. **On Tasks Characteristics:** W. Doyle, The Tasks of Teaching and Learning in Classrooms, paper presented at the Annual Meeting of the American Educational Research Association, San Francisco, April 1979; R.E. Slavin, 1980, Effects of Individualized Learning on Student Achievement, *Journal of Educational Psychology 72*, 520-524.

3. **Multilevel Models of Effectiveness.** Significant references include C.E. Bidwell and J.D. Kasarda, 1980, Conceptualizing and Measuring the Effects of School and Schooling, *American Journal of Education 88*, 401-430; and D. Monk, 1981, Toward a Multilevel Perspective on the Allocation of Educational Resources, *Review of Educational Research 51*, 215-256.

4. **Principal Leadership and School Improvement.** Useful descriptions and discussions are found in S.T. Bossert et al., 1983, The Instructional Management Role of the Principal, *Educational Administration Quarterly 18*, 34-64; D. Dwyer, G. Lee, B. Rowan, and S. Bossert, 1983, *Five Principals in Action: Perspectives on Instructional Leadership*, San Francisco: Far West Laboratory for Educational Research and Development; and J.W. Little, 1982, Norms of Collegiality and Experimentation: Workplace Conditions of School Success, *American Educational Research Journal 19*, 325-340.

5. **Effective Schools Projects.** Several good descriptions include M. McCormack-Larkin and W. Kritek, 1982, Milwaukee's Project RISE, *Educational Leadership 40*, 16-21; and T. Clark and D. McCarthy, 1983, School Improvement in New York City: The Evolution of a Project, *Educational Researcher 12*, 17-24.

EFFECTIVE SECONDARY CLASSROOM PRACTICES

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What students learn in school depends in large measure upon what happens in classrooms. This chapter contains a summary of what is known about the conditions that need to exist in secondary classrooms if students are to achieve the outcomes expected at this level of schooling. The purpose of this summary is twofold: (1) to provide administrators and instructional supervisors with a framework for thinking about teaching and learning in junior and senior high school classrooms as they make decisions about instruction; and (2) to suggest specific focal points for working directly with teachers to maintain and improve teaching effectiveness.

Several advances have recently been made in our knowledge of effective classroom practices (for reviews, see Good 1983 and Rosenshine 1983). Because much of the research has focused on teaching basic reading and arithmetic skills in the early elementary grades and on mathematics in the junior high school, data on teaching in secondary classrooms are limited. Nevertheless, findings from existing studies, when combined with related classroom and laboratory research, are beginning to suggest a comprehensive framework for understanding effective teaching (Doyle 1983). This framework is used here to build a model of effective practices in secondary classrooms.

The chapter is organized into four major sections. The first section contains a discussion of instructional time and its meaning for secondary teaching. The second section focuses on the nature of academic work in secondary classes as a way to examine students' opportunities to learn the curriculum. The third section addresses the basic instructional conditions that lead to productive use of classroom time. These basic conditions include provisions for classroom organization and management and instructional processes such as explanation, feedback, and correction for errors. This section also contains a brief guide to the instructional dimensions of individualized instructional programs and cooperative group systems. The final section contains a summary of basic principles that should shape instructional decisions in effective secondary schools.

TIME, CURRICULUM, AND TEACHING

Quantity of teaching has received considerable attention in research on teaching, especially in elementary classrooms, and many recent reform proposals have emphasized time as a central mechanism for school improvement (Denham and Lieberman 1980). There are, however, some important factors to consider when time is used as a measure of instructional quality or a target for improvement. In this opening section, some of these factors are discussed as a background for examining basic instructional processes.

Quantity of Instruction

Research on instructional time, as measured by such indicators as time-on-task or student engagement rate, has produced two major findings (Denham and Lieberman 1980; Karweit 1982; Soar and Soar 1983). First there are sometimes large differences across classrooms, schools, and school systems in the amount of time students spend learning various components of the curriculum. Second, differences in instructional time are often associated with student achievement.

This research has appropriately called attention to time as an important element to consider in instructional planning and decision making. If students are given only a small amount of instructional time, they are likely to learn less content than students who are given more time. Also, if a substantial increase is made in time allocated to a particular curriculum area, there are likely to be dramatic gains in student achievement in that area.

The findings do *not* mean, however, that simply increasing the quantity of instructional time in a school, by lengthening the school day or the school year for example, will automatically improve student achievement. Increasing the amount of poor quality instructional time—time spent listening to vague lectures, watching films unrelated to the curriculum, or copying sentences from the textbook to complete worksheets—is not likely to benefit anyone. To improve instruction, it is often necessary to go beyond simple measures of instructional time or student engagement, to examine how time in classrooms is filled and what teachers do to affect the quality of the time students spend engaged with subject matter. It is to these dimensions of quality that the discussion now turns.

Dimensions of Instructional Quality

The available research underscores two important dimensions of instructional effectiveness. The first of these dimensions is *opportunity to learn the content of the curriculum*. Findings from the Beginning Teacher Evaluation Study (Fisher, Berliner, Filby, Marliave, Cahen, and Dishaw 1980) indicate that it is not simply time but rather academic learning time—time spent working successfully with content measured on the achievement test—that is associated with student success. In thinking about instructional time, in other words, it is necessary to consider not only whether students are paying attention, but also what they are doing: solving equations, writing descriptive essays, or formulating hypotheses for a laboratory experiment. Measured in this way, time-on-task is partially an indicator of whether essential curriculum content is included in the academic program of a class and is being emphasized. In their review of studies which compared different science curricula, Walker and Schaffarzick (1974) found that inclusion and emphasis were basic factors accounting for differences in program effectiveness. Opportunity to learn, then, would seem to be a fundamental condition for student achievement.

The second important dimension is the *quality of instruction*. Given equal emphasis on content, differences in achievement will result from differences in the quality of instruction, that is, the design of assignments, the clarity of the teacher's explanations, the chances students have to practice, the extent to which progress is monitored, and the availability and accuracy of feedback. Furthermore, the quality of instruction will affect the time students need to learn (Bloom 1976). Students may need more time to learn when they do not receive adequate instructional support (Soar and Soar 1983).

Summary

Research on instructional time is best used to draw attention to the underlying mechanisms which produce achievement in classrooms. Adequate time

must be provided for instruction to occur, but the available time must be filled with content that represents important pieces of the curriculum, and students must be given high quality opportunities to learn the content. Because of the importance of these mechanisms, the rest of this chapter is focused on the instructional conditions that affect the quality of time spent in secondary classrooms.

OPPORTUNITY TO LEARN

Students learn whatever curriculum they have an opportunity to follow. If, for example, students spend time calculating answers to multiplication problems, they will learn *how* to multiply. If, in addition, they solve problems in which they choose from among several operations the ones appropriate to a particular problem, they will learn *when* to multiply. From this perspective, the quality of schooling is affected by the character of the academic work students do and the relation of this work to the expected outcomes of schooling.

Recently, some attempts have been made to understand academic work in terms of the tasks secondary students encounter in science, English, and mathematics classrooms (Doyle 1983; Doyle and Carter 1984; Doyle, Sanford, Clements, French, and Emmer 1983). This approach is especially useful for examining the nature of students' engagement with the curriculum. The approach also provides supervisors and teachers with a language for talking about the curriculum in use in a classroom.

Academic Tasks

The curriculum exists in classrooms in the form of academic tasks assigned by teachers for students to accomplish with subject matter. A task consists of:

1. **A product,** such as words in blanks on a worksheet, answers to a set of test questions, or an original essay;
2. **Operations to produce the product,** for example, copying words off a list, remembering words from previous instruction, applying a rule (such as "Plural nouns use plural verbs") to generate words, or making up "creative" or "descriptive" words;
3. **Resources,** such as directions to use their notes from a previous lecture, to consult the textbook, not to talk to other students, or not to use examples given in class.;
4. **The significance or "weight"** of a task in the accountability system of a class; for example, a grammar exercise might count as a daily grade whereas an essay might count 15 percent of the grade for a six-week term.

The concept of "task," in other words, calls attention to four aspects of a class assignment: a goal state or end product to be achieved; a problem space or a set of conditions and resources available to accomplish the task; the cognitive operations involved in assembling and using resources to reach the goal state; and the importance of the work to be done. These aspects provide students with essential information about how they are to work with subject matter. From this perspective, the tasks students accomplish shape their learning in fundamental ways. In addition, attention to the nature of academic tasks is necessary for understanding effective practices in secondary classrooms.

Teachers affect tasks, and thus learning, by describing assignments, providing explanations about the processes that can be used to accomplish the work of the assignment, serving as an instructional resource while students

are working, and managing accountability. These dimensions of a teacher's influence on academic work are discussed in more detail in the section on the quality of instruction. But first we will examine more closely the different types of tasks students can encounter in classrooms.

Cognitive Level of Academic Tasks

The cognitive level of an academic task refers to the *cognitive processes students use to accomplish it*. For many tasks, the primary emphasis is on (a) *memory* or having students reproduce information they have already seen, such as spelling; (b) *formulas* or having students apply a standardized procedure for generating answers—grammar rules or mathematical formulas, for example; or (c) *search and match* or having students identify passages in a text that answer factual "study" questions. Studies indicate that such tasks are quite common in secondary classes (Doyle et al. 1983; Farrell 1983).

Other tasks reflect an emphasis on higher cognitive processes. At the core, higher cognitive processes involve decisions about how to use knowledge and skills in particular circumstances. A task involving a higher level process might require students to recognize transformed versions of information or a formula they have already learned. For example, students might be asked to recognize the law of supply and demand in a particular historical case or situation. At more advanced levels, students might have to (a) select an operation or combination of operations to solve a word problem in math, (b) draw inferences from information given to formulate new propositions, or (c) plan a goal structure for a complex writing assignment. The focus in tasks involving higher cognitive processes, then, is on *comprehension, interpretation, flexible application of knowledge and skills*, and *assembly of information and resources* from several different sources to accomplish work.

Greeno (1983) has provided an instructive example of a higher level cognitive process, namely, the process of constructing a semantic representation of work problems in mathematics. He summarizes evidence suggesting that "successful students form intermediate representations that include relations among the quantities in a problem" (Greeno 1983, 7) before they decide which computational procedure is applicable. Expert problem solvers, in other words, begin work on a problem by doing a "qualitative" analysis to understand what its elements are, how they are related, and how their magnitude changes in the problem situation (see also Heller, Reif, and Hungate 1983). They then use this semantic representation of the problem to select the operations or equations to be used in computing an answer. Less successful students, on the other hand, skip this step and try to match computational procedures to the problem immediately.

Unfortunately, much of the instruction in mathematics omits this intermediate step of qualitative analysis. In presenting problem-solving strategies, teachers often focus on calculations rather than the interpretive analyses and strategic decisions that must be made to apply knowledge to specific cases. In addition, for many math assignments, students are told in advance which formulas or equations they are supposed to use in solving a set of problems and thus have limited opportunity or need to formulate semantic models of problems. As a result, students often become proficient in how to calculate solutions, but do not learn when to use these skills or how to apply them to unfamiliar situations.

One way to visualize a program of academic work in a class is to see each task as defining a gap in information that students have to provide by themselves. Small gaps can be crossed by reproducing information previously seen or by recalling and using a reliable formula. Larger gaps require that students organize information and connect what is known to the particular conditions of the task. Research cited in the next section indicates that gaps of different

sizes are associated with different configurations of classroom events and processes.

Two comments are in order concerning this description of academic work. First, the same "content" can be represented by fundamentally different tasks. For example, writing may occur as a sentence-combining task in which students put short sentences together to form more complex sentences, or as a composing task in which they must struggle to express their own interpretations and meanings. A list of topics a teacher covers gives only minimal information about the actual curriculum in use in a class. To understand and improve the opportunities students have to learn the curriculum, it is necessary to examine the tasks a teacher requires them to accomplish with content. Indeed, the academic task framework provides a language for instructional supervisors to talk with teachers about the content of their classes, in terms of the assignments made, the resources available to students, and the degree of accountability for work.

Second, not all students necessarily accomplish tasks with the operations intended by the teacher. Some complete their work in ways that circumvent the learning of subject matter, by copying work from someone else or guessing at answers, for example. At a more serious level, some students misinterpret assignments or use inappropriate strategies and inaccurate information to get the work done. For example, a student might always subtract smaller numbers from larger numbers regardless of their sequence in a problem, or he or she might have basic misconceptions about the laws of motion. If a teacher focuses only on whether students' answers are "correct" rather than on the thinking used to obtain the answers, such misconceptions are seldom noticed or corrected. One of the major tasks of a teacher is to monitor how students are doing academic work, by asking strategic questions to reveal a student's understanding of the content. Serious deficiencies in students' understanding can result when such monitoring does not occur (Erlwanger 1975).

Issues of Task Variety and Challenge

Critics of secondary schooling have recently bemoaned the dulling sameness of the curricular landscape and the absence of intellectual challenge and excitement (Boyer 1983; Goodlad 1984). For these critics, secondary school improvement requires, first and foremost, a sharp increase in the variety of tasks in classrooms and a serious upgrading of the cognitive level of the tasks students are asked to accomplish. The academic task model is especially responsive to this line of criticism, for it provides a framework for understanding what is involved in carrying out the suggested reforms. To illustrate this utility of the model, it is applied in this section to the issues of task variety and challenge in secondary classrooms.

Research on tasks suggests that the variety and challenge of academic work is governed by powerful classroom forces (Doyle 1983; Doyle and Carter 1984). One central mechanism that activates these forces is the accountability system in which academic work is embedded. In classrooms, students' work is judged by the teacher or by peers. Beginning in the elementary grades, students are sensitive to these judgments and take seriously work that carries major credit in the grading system of a class or requires that they perform in front of their fellow students (King 1980).

This evaluative climate of classrooms has two large effects on tasks. First, it superimposes a goal structure that is not intrinsic to the subject matter, namely, getting a good grade. Second, it engenders a concern among students for the *ambiguity* and the *risk* associated with different forms of academic work.

"Ambiguity," in this context, refers to how specific the information is

about the nature of an acceptable product and how reliable the operations available to students are for producing such a product. For tasks emphasizing memory or the use of a formula, students generally know what the product is in advance or can trust that the procedures, if followed, will generate an adequate product. For tasks emphasizing interpretation, assembly, and decision making, the product is, by necessity, less clearly specified in advance; if it were so specified, the students could merely copy it down or model it. Moreover, the procedures are more complex and less predictable. Thus, composing an original analytical essay is a more ambiguous task than memorizing a list of words for a spelling test.

"Risk," on the other hand, refers to the likelihood that students will be able to achieve an adequate product, the amount of "weight" the assignment carries in the class, and the extent to which criteria of adequacy will be applied strictly. Risk is affected, in other words, by how difficult a task is. Having to recall a long list of words is more risky than having to recall a short list; writing an original essay is more risky than applying a rule to choose the correct verb forms in a grammar exercise. In addition, the level of risk is defined by the amount of credit assigned to the product in the grading system. Major assignments involve greater risk than minor ones. Finally, risk is held in place by the teacher's enforcement of standards. If a wide variety of approximations of a final product are acceptable or bonus credit is plentiful, risk is reduced.

It is clear from these comments that tasks involving higher level cognitive processes or intellectual challenge bring with them high levels of ambiguity and risk for students. Students sometimes respond to these levels of ambiguity and risk by fairly direct public negotiations with the teacher. These attempts to negotiate focus on increasing the explicitness of a teacher's product specifications or the generosity of his or her judgments (Davis and McKnight 1976; Doyle and Carter 1984).

But even when such direct negotiation does not occur, higher level tasks are often difficult to carry out in classrooms for two reasons. First, the flow of activity slows down in the class when students find the work difficult or risky to accomplish. In other words, when students encounter large gaps in the work system, they hesitate. This slowing down of the rhythm of a class can have serious consequences for classroom management, a topic to be discussed in greater detail later in this chapter. Second, when difficult tasks are used, students' error rates go up and completion rates go down. When this happens, problems of student attention and motivation to work can occur. These conditions create tensions in a classroom between the academic task system and the demands for pace and momentum inherent in the management of classroom groups (Doyle 1980; Kounin 1970). Teachers often respond to such tensions by either reducing the cognitive demands of academic tasks, or introducing surplus credit in the form of bonus points to encourage students to take the risk of leaping over larger gaps (Doyle 1984b; Doyle and Carter 1984).

In sum, studies have shown that various pressures exist in classrooms to reduce the levels of ambiguity and risk associated with academic work, and these pressures make higher level cognitive tasks unstable. This research suggests that accomplishing reforms in the quality of academic work in secondary classrooms will require considerable teacher skill and determination. In particular, teachers must be able to anticipate pressures on the flow of work in the classroom and protect students' opportunities to make decisions about content. How teachers can accomplish these objectives is described in more detail in the next section on instructional conditions.

Summary

The opportunities students have to learn are shaped by the tasks teachers require them to accomplish. Teachers establish academic tasks by defining the

products students generate, the cognitive operations they are to use in accomplishing work, and the resources available to them. Tasks are driven in large measure by the teacher's accountability system, which defines the significance of different assignments and the criteria applied to judge adequacy of products. Tasks emphasizing higher level thinking are often difficult for teachers to manage in classrooms because of the reactions of students to the ambiguity and risk which necessarily accompany this form of work. A major implication of this approach is that improving the academic quality of secondary schooling will require careful planning and dedication by teachers and administrators, and a supportive climate for instructional improvement.

BASIC CONDITIONS OF INSTRUCTION

Academic tasks define the work environment of a classroom and the context in which teaching and learning take place. Tasks determine, in other words, the substance of instruction. Teachers influence students' achievement in profound ways, therefore, through the tasks they assign. At the same time, a teacher's instructional practices affect the way tasks are enacted and the quality of the time students spend accomplishing academic work. By explaining work clearly, monitoring student progress, providing confirmation and corrective feedback, and holding students accountable for work, a teacher increases the likelihood that students will benefit from the academic work they do.

This section contains a summary of what is known about the instructional conditions which foster students' learning in secondary schools. In keeping with the previous discussion of classroom tasks, attention is given to practices associated with different types of academic work.

Direct Instruction

Research on teaching, especially the teaching of basic literacy and computational skills in elementary and junior high schools, has established support for a direct, structured, and explicit approach to instruction (Brophy 1979; Good 1983; Rosenshine 1983). Direct instruction of this nature has the following essential features:

1. Goals for students' learning are made clear;
2. Progress through tasks is carefully organized and sequenced;
3. The teacher clearly explains and illustrates what students are to learn;
4. The teacher frequently asks direct questions to monitor students' progress and check their understanding;
5. Students are given ample opportunity to practice with prompts and feedback to insure success and to correct errors;
6. Students work with a skill until it is overlearned or automatic;
7. The teacher reviews regularly and holds students accountable for work.

Students learn more, in other words, when teachers give rich instructional support and many opportunities to receive help on the way to mastery. Such instruction obviously takes more time to accomplish than a cursory or haphazard approach to teaching.

Classroom Management

Classrooms that contain these conditions of instruction are also typically well managed. That is, rules and procedures are well established, and inappropriate and disruptive student behaviors are kept to a minimum (Brophy 1983; Sanford, Emmer, and Clements 1983). Research in secondary classrooms by Emmer and his colleagues (Emmer, Evertson, Sanford, Clements, and Worsham 1984) indicates that good classroom management begins on the first day of school, with a clear statement of rules and expectations for behavior, the introduction of procedures for routine classroom functions, careful monitoring of student compliance to rules and procedures, and early interventions to stop misbehavior when it occurs. In addition, effective managers establish a smooth-running system of activities to organize students for work on academic tasks, and carefully hover over and protect this activity system from disruption as they move students through the curriculum (Doyle 1980, 1984a). Good managers are sensitive, in other words, to the fact that a considerable amount of organizational work must be done to create a functioning system in a class for accomplishing academic work. Moreover, they are direct and explicit in communicating their management system to students.

Instructional Functions Rather Than Teacher Behaviors

In interpreting these findings on direct instruction and classroom management, it is essential to remember that the categories represent *instructional functions* rather than specific teacher behaviors. This simply means that directness can take quite different forms depending upon social, cultural, and local circumstances, and the problems of achieving effective instruction vary with specific conditions, such as lesson content, objectives, types of students in a class, and time of the year (Au 1980; Erickson and Mohatt 1982). Because of these variations in the ways teachers accomplish effectiveness, not all effective teachers fit a narrow profile of specific teaching behaviors. Good (1983, 137-138) noted, for example, that in his field experiments "some of the control teachers . . . obtained high levels of student achievement using instructional systems that differ from those presented in the program we have developed." The clear implication here is that classroom practices must be examined closely to determine whether essential functions are being served before judgments are made about quality. In the concluding section of this chapter some suggestions are given for avoiding pitfalls in analyzing teaching performance.

Direct Instruction and Meaning

Direct instruction does not mean rote and mindless drill. Direct instruction places a premium, rather, on telling students explicitly what they are to learn and demonstrating to them clearly the cognitive operations they are to use in accomplishing academic tasks. For example, students in direct instruction are told how to select the main idea of a passage or how to formulate a cause and effect argument. Good (1983) has used the term "active teaching" to underscore the dimension of meaningfulness in effective teaching. In active teaching, the teacher works deliberately, through explanations, modeling, questions, guided practice, and process feedback, to achieve meaningful student engagement with content. The emphasis in this approach is specifically on helping students understand what a procedure does and why it is applicable to a particular situation.

This clarity and explicitness of direct instruction or active teaching is likely to produce work that is highly meaningful to students. Indeed, such instruction is superior to the emphasis on memorization, drill and practice, and the search for decontextualized answers that is apparently common in secondary classrooms (Goodlad 1984). In addition, for most students, explicit in-

struction is probably superior to instruction that relies primarily on students' own abilities to infer patterns or invent procedures. Students commonly invent when they learn, but without careful teacher monitoring and assistance, their inventions can lead to serious misconceptions of content and "buggy" procedures for solving problems (Brown and VanLehn 1979; Eaton, Anderson, and Smith 1984; Erlwanger 1975; Resnick and Ford 1981).

Applications of Direct Instruction

The direct instruction model was derived primarily from research on teaching basic reading and arithmetic skills to educationally disadvantaged students in early elementary grades. The few studies available at the secondary level indicate that a direct approach is successful in high school remedial reading (Stallings, Corey, Fairweather, and Needels 1978) and in junior high school mathematics (Evertson, Anderson, Anderson, and Brophy 1980).

The clear emphasis in this work, however, is on *basic skills*, that is, the use of reasonably simple and standardized formulas or algorithms to generate answers. In addition, many of the studies focused primarily on *low achieving or novice* students. But students at the secondary level have a large repertoire of knowledge and skills in many school subjects and are beginning to move from concrete to formal operational thinking. They are developing, in other words, a capacity to think more analytically and abstractly than they could in the elementary grades. Moreover, the demands of the secondary curriculum shift from the basic skills of elementary school to content knowledge embedded in academic disciplines. As a result, the secondary school curriculum requires an emphasis on knowledge of specific domains, which includes theoretical understandings as well as problem-solving strategies, in addition to basic skills. In light of these considerations, it is reasonable to ask whether the direct instruction model is appropriate for secondary students and applicable to the full range of objectives contained in the curriculum.

Direct Instruction in Comprehension and Problem-solving Strategies

Recently, several attempts have been made to extend direct instruction beyond basic skills to include operations involved in comprehension, problem solving, and more complex academic work (Collins and Smith 1980; Pearson and Tierney 1984). In many instances, these attempts have been successful. Good and Grouws (1981) found, for example, that the direct teaching of problem-solving strategies in math improved the performance of junior high school students in this area. Similarly, Hansen (1981) successfully tested a direct instruction procedure for helping students make inferences in reading. An approach called "attack strategy training" was shown to be effective in helping lower achieving students learn general strategies for solving arithmetic problems of a particular type (Carnine and Stein 1981; Cullinan, Lloyd, and Epstein 1981). In the field of writing, Scardamalia, Bereiter, and Woodruff (1982) devised a computerized system for helping students learn goal structures and organizational strategies by selecting from among prewritten sentences. Finally, Heller and Reif (1984) designed a procedure for making explicit the knowledge and procedures required to generate theoretical descriptions of problems in physics.

Rosenshine (1983) argues that direct instruction is appropriate, in principle, for complex strategies, including learning how to be an independent learner, and for older, higher ability students. As the age and ability of the students increase, however, the size of steps is larger and there is less need to check understanding frequently. It is also important to note that flexibility in using these strategies, that is, an ability to transfer outside of the immediate training

situation, occurs only if students understand why the strategies work and are given practice in deciding when to use the strategies (Brown and Campione 1977; Mayer and Greeno 1972). In other words, there must be an emphasis on meaning in strategy instruction.

Threats to Meaning in Instruction

Meaningfulness is a central ingredient in effective teaching but its existence is often perilous. In the daily routines of organizational life in classrooms, meaning can slip away or be pushed aside by other priorities and processes. It is useful, therefore, to examine some of the ways in which meaning in instruction can be threatened.

TOO MUCH EMPHASIS ON SKILL

Problem solving in academic subjects is not simply a matter of skill. To solve academic problems, students need domain-specific knowledge in the subject area (Resnick and Ford 1981). Chi, Feltovich, and Glaser (1981), for example, examined differences between novice physics students and expert physicists in sorting physics problems by type. They found that experts were able to use their understanding of abstract physics principles to interpret problems in terms of underlying principles not explicitly stated in the problem texts. Novices, on the other hand, attended to isolated details and failed to make key inferences about the meaning of problems. The investigators concluded that the difficulties novices had stemmed largely from deficiencies in their theoretical knowledge of physics and how it is represented in problem situations.

Heller, Reif, and Hungate (1983) have argued from their research on problem solving in physics that, in addition to specific computational procedures, students need to be taught the domain-specific knowledge required for understanding problems, constructing problem descriptions, and selecting principles and concepts to apply to particular cases. They further suggest that this knowledge can be taught by having teachers clearly explain the processes involved in arriving at a solution strategy; having students formulate problem descriptions, think aloud as they solve problems, and compare their processes to that of experts; providing coaching and guidance while students practice problem solving; constructing tasks that emphasize the qualitative or interpretive components as well as the computational aspects of problems; and testing for understanding and reasoning processes.

At the level of classroom practice, a concern for meaning would also require that a teacher focus explicitly on the semantic thread that ties tasks together across separate class sessions (Doyle 1984b). When students are studying topics which extend across several days, such as the nature of the scientific method or the operations of the circulatory system, a teacher needs to describe the connections between lessons, in order to build broad understandings of content and place individual tasks within a wider context of understanding. In addition, a teacher needs to design tasks that require students to integrate information across individual lessons and class sessions.

In sum, meaning in school subjects often resides in the concepts and principles of the disciplines. If skills are isolated from this propositional context and are treated as interchangeable entities in the daily scheduling of lessons, then meaning is likely to be lost and students will not acquire flexibility and fluency in using their skills.

TOO MUCH EMPHASIS ON EXPLICITNESS AND ORDER

Considerable attention in this review has been given to the value of explicitness and clarity in fostering student achievement. But these features can be counterproductive under certain circumstances. This effect is especially ap-

parent when students are learning to interpret materials or problems and to make decisions about how and when to use skills and strategies. It is necessary, of course, to teach students explicitly how to interpret problems and how to make decisions. Such instruction, especially in the early stages of learning, can enhance meaning. At some point, however, the task environment must be made sufficiently ambiguous to give students room to exercise these operations. Students must, in other words, be given opportunities within the task system to go beyond the information given and struggle with meaning on their own. Too much explicitness concerning the operations to use or the nature of the final product reduces the need for students to engage in this struggle. As a result, they are not afforded the opportunity to learn key aspects of the content.

Class sessions in which students are struggling for meaning are likely to appear less well organized and efficient than sessions devoted to explicit instruction in skills or strategies (Doyle 1984b). As noted earlier, ambiguous tasks are inherently unstable and students are likely to hesitate in getting started, take a large amount of time to accomplish the work, and negotiate with the teacher to increase explicitness or reduce risk. Moreover, completion rates are often low and error rates high when tasks are ambiguous. In such situations, student engagement will probably be sporadic and productivity, in terms of the number of tasks accomplished and the degree of student success, will probably be low. It is important, however, that a teacher learn to handle these pressures on classroom management if students are to receive a full range of learning opportunities in a subject.

There is an important message here for teacher evaluation. If the criteria for judging teaching place overriding emphasis on clarity, engagement, and order, it is possible that teachers will avoid ambiguous tasks because of their impact on classroom management efficiency. Teachers will be forced, in other words, to smooth out the work system in advance, emphasize skills and guided practice, and avoid tasks which require students to struggle with meaning. In such management-driven classes, it is probable that meaningfulness and higher level processing of subject matter can be pushed aside. This is *not* to say that inefficient instruction is necessarily meaningful or effective, or that ambiguous tasks can be productive if students are not given explicit preparation in advance. The point is, rather, that evaluation must be sensitive to the overall purposes of instruction in a particular class and to the effects of different types of academic work on classroom processes.

In closing, it is important to note that the threats to meaning identified here do not represent practices that are fundamentally wrong. Rather, meaning is threatened by placing too much emphasis on a single dimension of effectiveness. More is not necessarily better in teaching.

A Brief Guide to Some Programs

In the past few years, several instructional programs which embody features of effective classroom instruction and management have been designed and tested. In particular, attention has been given to the development of systems for cooperative group learning and for individualized instruction. A brief guide to these programs is presented here to suggest factors to consider in selecting programs for secondary classrooms.

COOPERATIVE LEARNING

Technologies for use of small cooperative groups in classrooms are aimed at improving student achievement, group cohesion, friendship patterns, and race relations in schools (Aronson 1978; Sharan 1980; Slavin 1980). One such system developed by Slavin (1980) is called Teams-Games-Tournament (TGT). In this system, students are assigned to heterogeneous teams of four or

five members to prepare cooperatively for academic contests with members of other teams. For tournaments, competition is arranged between students of equivalent ability and each student has a chance to contribute to his or her team's score.

The evidence indicates that some cooperative systems increase achievement, especially for lower achieving students, and have a marked impact on group cohesion and multi-racial interactions (Slavin 1980). The effects for achievement appear to result from the careful planning of content necessary for conducting cooperative arrangements, the explicit structuring of academic tasks, the inclusion of all students in the work system of the class, and the degree of individual accountability for doing the work. In addition, the system provides a clear set of procedures for helping teachers implement a very complex classroom arrangement.

INDIVIDUALIZED INSTRUCTION

When instruction is individualized, learning tasks and instructional conditions are adapted to the abilities, accomplishments, or interests of different students. In contrast to group-paced instruction, students in individualized programs often follow their own curriculum and time schedule, and they spend most of their time either in small groups or by themselves with self-instructional materials. In many instances, individualized programs incorporate a learning-for-mastery format in which all students are required to achieve a criterion level, but time necessary to reach the criterion is allowed to vary. In a mastery format, goals are explicit, the sequence of instruction is thoroughly structured, and testing and feedback are frequent. It is important to emphasize, however, that many mastery programs rely on group instruction rather than private self-instruction.

Some investigators have reported impressive results for mastery programs (Block and Burns 1976), and individualized programs at the college level appear to be quite effective (Kulik, Kulik, and Cohen 1979). Studies at the secondary level are less encouraging. Bangert, Kulik, and Kulik (1983) synthesized findings from 51 studies comparing individualized instruction, which often included a learning-for-mastery format, with conventional teaching in secondary courses. (In the secondary studies reviewed by Block and Burns, both experimental and control groups learned from self-instructional materials and no comparisons with conventional teaching were made.) Bangert and his colleagues concluded that individualized programs, in comparison with whole-class teaching, have only slight effects on achievement and no significant impact on self-esteem, critical thinking, or attitudes. The reviewers suggested that secondary students, in contrast to college students, may need more guidance, support, and external pacing of work than individualized programs typically afford.

Slavin, Leavey, and Madden (1984) have recently devised a system called Team Assisted Individualization in which students work together on individualized materials and their performance contributes to team scores. In addition, students correct one another's work so that the teacher is given more time to instruct small groups and work with individuals. This system shares many of the features of earlier cooperative models: careful planning of content, individual accountability, and access by all students to instruction.

In summary, there are three important considerations in making decisions about individualized instruction. First, in practice, individualized programs are effective to the extent that they arrange time and classroom conditions so that all students receive basic instructional support, such as clear goals, explicit teaching, and opportunities for guided practice and feedback. There is less reason to believe that adapting to particular student characteristics, such as attitudes, preferences, and personality styles, will enhance

achievement (Good and Stipek 1983). Second, adaptation sometimes results in substantial differences in curriculum across ability levels. As a result, lower achieving students are often given little opportunity to learn what their higher ability peers learn. Finally, it is often quite difficult to manage the complex arrangements and time flow problems associated with individualized instruction in classrooms (Arlin 1982; Soar and Soar 1983). As a result, individualized programs can lead to a substantial loss of productive time for instruction.

BASIC PRINCIPLES FOR INSTRUCTIONAL DECISIONS IN SECONDARY SCHOOLS

This final section is focused on implications of research on effective practices in secondary classrooms. These implications are stated in the form of basic principles that can guide instructional decisions in secondary schools. In addition, an attempt is made to suggest ways an administrator or instructional supervisor might use these principles to help teachers improve instruction.

Principle 1: Pay Attention to Time

Time is a basic condition of effective teaching. Students will learn what is included and emphasized in the curriculum, and time allocations reflect the priorities and commitments of a teacher, a school, or a school district. In addition, students must be engaged with the curriculum, that is, they must spend time working successfully with content that leads to outcomes specified in the curriculum.

Do not oversimplify time, however. Focusing attention on time is likely to improve general school achievement by mobilizing and concentrating energies and resources on common instructional aims. But time is only a starting point. Merely changing time allocations or increasing the amount of poor quality instruction will not improve student learning. Moreover, teachers who are unable to achieve adequate amounts of student engagement are likely to have fundamental problems with basic management and instructional processes. Achieving effective schooling requires a consideration of how opportunities to learn are constructed for students and what basic instructional conditions exist in classrooms.

Principle 2: Examine Students' Opportunities to Learn

The quality of the time students spend in school is affected by the nature of the opportunities they have to learn. These opportunities, in turn, are defined by the academic tasks teachers assign and hold students accountable for. Tasks differ in terms of the type of knowledge and cognitive processes required for accomplishment. Some tasks emphasize only the reproduction of information contained in texts or the application of simple and reliable formulas. Other tasks call upon higher cognitive processes of comprehension, interpretation, inference, and the assembly of information and resources to construct acceptable products.

Considerable attention has recently been given to the lack of intellectual variety and challenge in secondary classrooms and the need for more tasks involving understanding and higher cognitive processes. These proposals have merit, but classroom studies suggest that achieving this goal will be difficult. Challenging academic work is inherently high in ambiguity, risk, and difficulty for students. These characteristics of academic work generate pressures that affect the pace and flow of classroom events, the motivation of students to work, and the equity of the accountability system. In addition, students sometimes negotiate directly to increase the explicitness of task requirements or to

reduce the teacher's grading standards. Such pressures often lead teachers to simplify the demands of academic work and, thus, omit important aspects of the curriculum.

Principle 3: Preserve Basic Instructional Conditions

Research supports the general use of direct, structured, and explicit approaches to instruction. Such approaches are characterized by clear goals, carefully organized and sequenced learning tasks, explicit and meaningful explanations, frequent questions to check understanding, ample opportunities to practice with prompts and feedback, an emphasis on mastery, regular reviews, and accountability for work. Achieving these conditions begins on the first day of class with a well constructed plan for organizing groups of students and managing the routine functions that occur in a classroom. Instructional programs that contain these elements of structure, guidance, and access to help are likely to be effective.

This direct approach appears to be appropriate for the content and the students in secondary classes. Indeed, considerable success has been shown recently in the direct teaching of problem solving and other higher order cognitive strategies. For more advanced students, however, the size of the steps in direct instruction is likely to be larger and the amount of prompting less than that required for novices or lower achieving students.

There are circumstances, however, in which the explicitness, orderliness, and skill development that characterize direct instruction are not appropriate. To give students room to practice interpretive skills, go beyond the information given, and struggle with the construction of meaning, it is necessary to introduce some ambiguity into task environments. Class sessions in which such tasks are being pursued are not likely to fit the profile of clarity and efficiency implied by direct instruction. The proposition should not be interpreted, however, as a blanket approval of ambiguous and inefficient teaching. To be successful with tasks involving higher order cognitive processes, teachers must carefully structure the tasks students are to accomplish, clearly focus students' attention on the operations to be learned, provide explicit instruction and models of these processes, monitor progress and provide feedback, and hold students accountable for work. In addition, teachers must have established orderly classroom routines and procedures and a climate of seriousness and civility. If these instructional and management conditions are not in place, then tasks involving higher order processes will not be accomplished and the basic orderliness of the classroom will be at risk.

Principle 4: Look Closely at Teaching and the Content of Instruction

One of the central messages of this chapter is that effective classroom practices are not always immediately obvious. It is important to remember that directness can take different forms, and the basic instructional functions necessary for prompting student achievement can be expressed in different ways. In other words, don't expect uniformity. Differences at the level of specific behavior will result from such factors as the characteristics of the teacher and the students, the particular content being considered, and the qualities of the environment in which teaching and learning are taking place. Evaluation of teaching must, therefore, focus on the instructional functions being served rather than the surface forms of teacher behavior.

In addition, administrators and instructional supervisors must work to achieve a balance in interpreting classroom observations. On the one hand, ambiguity and inefficiency can signal poor planning and inadequate instruction. On the other hand, if too much emphasis is placed on explicitness, order,

and the external control of teaching, then problem solving and higher cognitive aspects of the curriculum are likely to be pushed out of classrooms.

The clear sense of recent research on teaching is that understanding classrooms requires careful and continuous observation and analysis. Isolated observations of a limited number of classroom processes have been replaced by detailed analyses of the content, operations, and practices of teaching and learning. To understand the curriculum in use in a classroom, for example, it is necessary to examine how work is defined for students, what resources are available to them, and for what they are held accountable. To gather such information, it is necessary to examine, through observations and interviews, a unit of work and events that occur over several class meetings. The academic task model explicated in this chapter provides a framework for organizing such information and talking with teachers about the opportunities they afford students in their classes. With research-based frameworks such as this, the ability of supervisors to interpret and influence classroom practices can be increased substantially.

CONCLUSION

Considerable progress has been made recently in understanding the essential features of effective teaching practice. Although more needs to be learned about how teaching works, especially in secondary classrooms, there is a rich foundation for sustaining and enhancing the quality of schooling.

This chapter contains a summary of available knowledge about effective classroom practices in secondary schools. A special effort has been made to organize this knowledge in a form that will be useful to administrators, instructional consultants, and policy makers in carrying out their tasks of achieving educational excellence. In the end, one message is especially clear. Improving the quality of schooling requires that classroom instruction be taken seriously and that simple solutions to complex problems be recognized as fundamentally misleading.

REFERENCE NOTES

1. **The Character of Secondary Schools.** Secondary schools have recently moved to the center of public attention. Influential reports include E.L. Boyer, 1983, *High School: A Report on Secondary Education in America,* New York: Harper and Row; and J.I. Goodlad, 1984, *A Place Called School,* New York: McGraw-Hill. Goodlad's book contains a large amount of descriptive information about what goes on in high school classrooms.

2. **Time in Classrooms.** An excellent collection of articles on time in classrooms is C. Denham and A. Lieberman, eds., 1980, *Time to Learn,* Washington, D.C.: National Institute of Education. This book contains a useful introduction to the concept of "academic learning time" in C. Fisher, D. Berliner, M. Filby, R. Marliave, L. Cahen, and M. Dishaw, Teaching Behaviors, Academic Learning Time, and Student Achievement: An Overview. Nancy Karweit provides an important perspective on time research in *Time on Task: A Research Review* (Report 332), Baltimore, MD: Center for Social Organization of Schools, Johns Hopkins University, 1982.

3. **Academic Work.** For a somewhat technical introduction to the concept of "academic work" and a review of relevant literature, see W. Doyle, 1983, Academic Work, *Review of Educational Research 53,* 159-199. For specific studies of academic work in junior high school English, mathematics, and science classes, see W. Doyle and K. Carter, 1983, Academic Tasks in Classrooms, *Curriculum Inquiry 14,* 129-149; and W. Doyle, J. P. Sanford, B. S. Clements, B. French, and E. T. Emmer, 1983, *Managing*

Academic Tasks: Interim Report of the Junior-High School Study (R&D Report No. 6186), Austin: Research and Development Center for Teacher Education, The University of Texas at Austin.

Useful information on the nature of academic work in mathematics and science can be gained from L. Resnick and W. Ford, 1981, *The Psychology of Mat[illegible] for Instruction*, Hillsdale, NJ: Lawrence Erlbaum Associates; J.G. Greeno, 1983, Skills for Representing Problems, paper presented at the annual meeting of the American Educational Research Association, Montreal, Canada; and M.T.H. Chi, P. Feltovich, and R. Glaser, 1981, Categorization and Representation of Physics Problems by Experts and Novices, *Cognitive Science 5*, 121-152.

4. **Effective Classroom Teaching.** In the past 10 years, an important body of research findings on effective teaching in classrooms has accumulated. For comprehensive reviews of this research, see T.L. Good, 1983, Classroom Research: A Decade of Progress, *Educational Psychologist 18*, 127-144; and B.V. Rosenshine, 1983, Teaching Functions in Instructional Programs, *Elementary School Journal 83*, 335-351.

   For studies specifically related to effective practices in secondary classrooms, see J. Stallings, R. Corey, J. Fairweather, and M. Needels, 1978, *A Study of Basic Reading Skills Taught in Secondary Schools*, Menlo Park, CA: SRI International; and C. Evertson, C. Anderson, L. Anderson, and J. Brophy, 1980, Relationships Between Classroom Behaviors and Student Outcomes in Junior High Mathematics and English Classes, *American Educational Research Journal 17*, 43-60.

   For research-based guides to classroom management, see E.T. Emmer, C.M. Evertson, J.P. Sanford, B.S. Clements, and M.E. Worsham, 1984, *Classroom Management for Secondary Teachers*, Englewood Cliffs, NJ: Prentice-Hall; and W. Doyle, 1980, *Classroom Management*, West Lafayette, IN: Kappa Delta Pi.

5. **Direct Instruction for Comprehension and Problem Solving.** Recently there has been rapid growth in the development procedures for direct instruction in comprehension and problem solving. Important work includes: A.L. Brown and J.C. Campione, 1977, *Memory Strategies in Learning: Training Children to Study Strategically* (Tech Report 22), Urbana, IL: Center for the Study of Reading, University of Illinois; P.D. Pearson and R.J. Tierney, On Becoming a Thoughtful Reader: Learning to Read Like a Writer, in A.C. Purvis and O. Niles, eds., 1984, *Becoming Readers in a Complex Society, Eighty-third Yearbook of the National Society for the Study of Education, Part I*, Chicago: University of Chicago Press; J. Hansen, 1981, The Effects of Inference Framing and Practice on Young Children's Reading Comprehension, *Reading Research Quarterly 16*, 391-417; D.W. Carnine and M. Stein, 1981, Strategy and Organizational Practice Procedures for Teaching Basic Facts, *Journal for Research in Mathematics Education 12*, 65-69; and J.I. Heller, F. Reif, and H.N. Hungate, 1983, *Toward Theory-Based Instruction in Scientific Problem Solving*, paper presented at the annual meeting of the American Educational Research Association, Montreal, Canada. For a concise introduction to the important new work on dealing with students' preconceptions, see J.F. Eaton, C.W. Anderson, and E.L. Smith, 1984, Students' Misconceptions Interfere with Science Learning: Case Studies of Fifth-Grade Students, *Elementary School Journal 84*, 365-379.

6. **Research on Cooperative Learning and Individualized Instruction.** For an excellent critical review of research on cooperative learning, see R.E. Slavin, 1980, Cooperative Learning, *Review of Educational Research 50*, 315-342. For perspectives on individualized instruction in classrooms, see R.L. Bangert, J.A. Kulik, and C.C. Kulik, 1983, Individualized Systems of Instruction in Secondary Schools, *Review of Educational Research 53*, 143-158; T.L. Good and D.J. Stipek, Individual Differences in the Classroom: A Psychological Perspective, in G. Fenstermacher and J. Goodlad, eds., 1983, *Individual Differences and the Common Curriculum, Eighty-second Yearbook of the National Society for the Study of Education, Part I*, Chicago: University of Chicago Press; and M. Arlin, 1982, Teacher Responses to Student Time Differences in Mastery Learning, *American Journal of Education 90*, 334-352.

EFFECTIVE SECONDARY SCHOOLS

THOMAS B. CORCORAN
Research for Better Schools

The policies, practices, and organizational characteristics of schools affect the behavior of their students and the levels of their academic achievement in systematic and predictable ways. This commonsensical proposition is the essence of the findings of the recent studies collectively referred to as the effective schools research." This research demonstrates that effective schools, like excellent companies, have some common characterisitics, and that these characteristics can be molded and manipulated to improve effectiveness. It is the purpose of this chapter to summarize the contribution of this "new" knowledge and align it with our understanding of the practice of public secondary education and with the design and implementation of improvement initiatives for secondary schools.

In this chapter, the term "secondary" refers to middle schools, junior high schools, and high schools. Greater emphasis is given to the issues surrounding high school effectiveness, however, because there is a larger and more significant research literature on this topic than there is on similar issues pertaining to the education of early adolescents. In addition, following the admonitions of Joan Lipsitz (1984) and Sara L. Lightfoot (1983), a distinction is made between successful or good schools and effective schools. The latter term has come to refer to ". . . safe, orderly schools where poor children, as well as middle-class children, perform reasonably well academically, as indicated by standardized measures of academic achievement" (Lipsitz 1984). Following Lipsitz, the term "successful schools" is used below to describe schools that are effective but that meet more than these minimum expectations, and that are regarded as good schools by their constituents—staff, parents, students, and community. As Lightfoot notes this is "a broader, more generous perspective than the one commonly used in the literature on effective schools." Goodness is not a static or absolute quality that can be assessed by a single indicator of success; it is a more complex and holistic concept that recognizes that schools operate in a context and that they change over time (Lightfoot 1983).

This chapter is organized into six major sections. The relationship between the effective schools research and current reform movement is discussed in the first section. This section also contains a general overview of the effective schools literature. Sections two and three examine some of the limits of this knowledge base, particularly as it is applied to the improvement of secondary education. Section four addresses the stubborn problem of defining appropriate criteria for the assessment of effectiveness in secondary education. Studies of successful secondary schools are summarized in the fifth section. And in the final section, issues of change and improvement in secondary schools are discussed and some implications for reform are presented.

REFORM AND RESEARCH ON SECONDARY SCHOOLS

The topic of secondary school effectiveness—and success—is particularly timely because public attention once again is being directed to the critical examination of the purposes and the effectiveness of the nation's public secondary schools. The urge for educational reform appears to be emerging as a reoccurring event in American life, taking place at intervals of 10 to 15 years. During the last cycle in the early 1970s, studies by blue-ribbon panels, foundations, and national educational organizations concluded that American secondary schools were in trouble because they were inhumane and overly rigid. Schools were viewed as dull, authoritarian places whose offerings were often unrelated to either the needs of their students or their communities. More student choice, greater individualization of programming, more community involvement, better career preparation, an earlier school-leaving age, and smaller schools were among the remedies proposed. (Passow 1977; Timpane, Abramowitz, Bobrow, Berryman, and Anthony 1976).

But neither the dire warnings about increased student alienation nor the recommendations for reform generated much public response—perhaps because the public was preoccupied with Vietnam and Watergate, or perhaps because the reformers' emphasis on student rights and increased choice, rather than higher standards and tougher discipline, did not match popular notions about what adolescents needed most. The Rand Corporation's review of the reports and recommendations of this period found there was inadequate data to conduct a proper assessment of the proposals (Timpane et al. 1976). Lacking either strong public or professional support, state and federal actions to implement the recommendations were weak and short-lived. Nevertheless, many of the recommendations were implemented in the nation's high schools (Cusick 1981).

Beginning with the Paideia Proposal in 1982, a new round of reports and studies have appeared and this time they have found the public more receptive. (Adler 1982; Boyer 1983; The College Board 1983; The Education Commission of the States 1983; Goodlad 1983; The National Commission on Excellence 1983; The National Academy of Sciences 1984; The National Science Board Commission on Precollege Education in Mathematics, Science, and Technology 1983; Sizer 1984; and the Twentieth Century Fund Task Force 1983). Too many students, these current critics contend, drift through the schools, unchallenged and unmotivated, getting by with as little work as possible. Sizer (1984) refers to this as "the conspiracy of the least" in which overworked teachers and unmotivated students negotiate tacit understandings to minimize the work required to achieve passing grades. The reports present a comprehensive and, on balance, highly negative assessment of the health of public secondary education. This strong criticism has stimulated and focused growing public concern about the quality of the nation's 29,000 public middle schools, junior high schools, and high schools (U.S. Department of Education 1983). These schools serve over 90 percent of the youth enrolled in secondary education.

Media accounts of declining test scores, failure rates on minimum competency tests, school attendance problems, and increasing drop-out rates in some locales had laid the groundwork for public acceptance of the reports. The informed public was already aware that many youths were failing to gain basic academic skills and that the social cost in terms of government programs, delinquency and crime, and productivity was too high. Since few adolescents are intellectually unable to complete the academic requirements of high school, policy-makers, parents, and educators have been asking why so many are failing and why some schools seem to be consistently more successful than

others. These real performance failures were accompanied by a decline in the number of voters with children in school, and a backlash against teacher unions (Kirst 1981). Up until 1983 there was a steady decline in public confidence in the public schools, paralleling the public's general loss of faith in society's institutions. This trend seems to have been reversed in the past year (*Newsweek* October 22, 1984, 68).

The authors of the most recent reform reports see the issues differently than their predecessors of the early 1970s. Although not always in agreement about the actions to be taken, the authors of the new reports do generally agree about the nature of the problems to be addressed. These include the lack of a core curriculum, poorly articulated programs, lax discipline, low standards, ineffective instruction, poorly motivated staff and students, lack of attention to thinking skills, poor working conditions in schools, and weak leadership. Summaries of the reports and comparative analyses of their recommendations have been prepared by a number of organizations. (Spady and Marx 1984; Griesemer and Butler 1983; Michigan Association of School Boards 1983; Passow 1984).

The conclusions of the critics often are supported by references to studies of "effective" schools. Based largely on studies of elementary schools, the effective schools research has become both the basis of new theory in education and the ideology of a movement seeking school improvement and greater equity in educational attainment. The most popular statement of this research, the so-called Five Factor Theory, identifies strong building leadership, clear goals, an orderly school climate, high expectations and standards, and frequent monitoring and assessment of student progress as the essential characteristics of effective schools (Edmonds 1979). Effective schools are described as being different from schools in general. They are more tightly managed. Their curriculum, instructional practices, and tests are more carefully aligned, and their work directed toward agreed-upon goals. Such schools, it is contended, are able to reduce the effects of socioeconomic background on academic achievement. They are "strong" schools that are able to make greater demands on their students, with policies and practices which reduce the influence of social environment and peer culture on student behavior and academic performance. Studies of these schools suggest that the processes of schooling and the social environment of schools account for a significant portion of the variation in achievement among schools. Comprehensive reviews of this research have been conducted by Purkey and Smith (1983), MacKenzie (1983), Rutter (1983), Cohen (1983) and Clark, Lotto, and Astuto (1984).

The school and classroom characteristics associated with effectiveness have been summarized in many forms and widely distributed. Almost all educators now profess some familiarity with the findings. The "summaries" vary from Edmonds' (1979) five factors to the state of Arizona's (1983) nine-page checklist containing 95 specific characteristics. Some of the summaries contain only findings from studies of effective schools; others combine these with the findings drawn eclectically from studies of teacher effectiveness, classroom management, instructional leadership and school climate. The bibliographies accompanying these summaries often contain over a hundred references and new studies continue to appear. A great deal of information is being gathered about school effectiveness, but the popular summaries of this knowledge vary in their conceptualization, accuracy, comprehensiveness, and level of abstraction.

For the purposes of this paper, the synthesis prepared by Steward C. Purkey and Marshall S. Smith (1983) will be used as the 'state of the art' summary of knowledge about effective schools. Purkey and Smith are simultaneously quite critical of the studies and optimistic about the utility of the findings for school improvement. Their summary is presented in Figure 1.

Figure 1: Dimensions of Effective Schooling*

Organizational-Structure Variables

1. School-site management. ". . . the leadership and staff of the school need considerable autonomy in determining the exact means by which they address the problem of increasing academic performance."
2. Instructional leadership. ". . . leadership is necessary to initiate and maintain the improvement process."
3. Staff stability. In a successful school, further success is promoted if the staff remains together.
4. Curriculum articulation and organization. ". . . a planned, purposeful program of courses seems to be academically more beneficial than an approach that offers many electives and few requirements."
5. Schoolwide staff development. ". . . staff development should be schoolwide rather than specific to individual teachers and should be closely related to the instructional program . . ." Long-term support and reinforcement are required.
6. Parental involvement and support. ". . . parents need to be informed of school goals and student responsibilities, especially with regard to homework."
7. Schoolwide recognition of academic success. When schools publicly honor academic achievement, students are encouraged to adopt similar norms and values.
8. Maximized learning time. Schools emphasizing academics devote a greater portion of the day on academics, with more active learning and fewer interruptions.
9. District support. Few significant changes can be realized without district support. Guiding and helping is probably the best role for the district office.

Process Variables

1. Collaborative planning and collegial relationships. ". . . change attempts are more successful when teachers and administrators work together." Collegiality breaks down barriers, encourages sharing, promotes unity and commonality among the staff.
2. Sense of community. The feeling of being a part of a supportive community contributes to reduced alienation and increased achievement. Schools can create a sense of community through use of ceremony, symbols, and rules.
3. Clear goals and high expectations. Schools need to focus on goals they deem most important and continually monitor pupil and classroom progress toward those goals. High expectations for work and achivement also characterize successful schools.
4. Order and discipline. An environment which is quiet, safe, and non-distracting promotes learning. ". . . clear, reasonable rules, fairly and consistently enforced, . . . reduce behavior problems . . . and promote pride and responsibility in the school community."

*Adapted from Purkey, S. and Smith, M. S. 1983. Effective Schools: A Review. *The Elementary School Journal* 83 (4), 1983, 427-452.

The variables or characteristics listed above taken as a whole form a distinctive type of school culture and, in the view of most authors, it is this organizational culture that is the key to effectiveness. It is not simply the presence

or absence of these characteristics that accounts for the effectiveness of a school. The norms, rules, rituals, values, technology, and curriculum combine to create a culture of achievement, a press for excellence. This is the "ethos" (Rutter, Maughan, Mortimore, Ouston, and Smith 1979) or climate mentioned in other effective schools studies as a critical factor in their success.

These findings and the theoretical work they have stimulated can contribute to the process of reform in secondary education in several ways. First, the research has raised issues of policy and practice heretofore neglected by policy-makers. How much authority should school principals have? How does total school time vary across districts and how is it allocated and used? Are there sufficient rewards for academic achievement and growth? Second, the school variables found to be related to achievement provide a framework for assessing reform proposals. Are the reformers addressing the most critical issues? Are there some issues they have ignored? Are their proposals formulated in a manner that suggests successful implementation? Third, the findings are being used to conduct organizational audits in schools. What are the strengths and weaknesses in a building? Are there deficiencies in critical areas? Similarly, the findings could be used to develop indicators of quality for state evaluations and regional accreditation procedures. Finally, the research has been used to design comprehensive school improvement interventions in New York, St. Louis, Milwaukee, and many other places. But as significant as these current and potentially powerful applications of the research may become, they are both limited by the character of the research and by the character of the policy-making process in education.

THE LIMITS OF THE EFFECTIVE SCHOOLS RESEARCH

The studies of effective schools have been subjected to extensive conceptual and methodological criticism (Cuban 1984; D'Amico 1982; Purkey and Smith 1983; Rowan, Bossert, and Dwyer 1983; Tomlinson 1981). Critics have pointed out the lack of longitudinal studies, the fuzzy variables, the varying definitions, the use of basic skills performance as a sole outcome criterion, the neglect of variations in achievement within schools, the small samples, and so on. Most of the reviewers have concluded that the research is promising but have warned that efforts to simply adopt the characteristics may not work in all schools and may be dysfunctional in others. Yet, almost all of the reviewers agree that the research on school effectiveness is restoring a sense of optimism about school success, reviving feelings of efficacy among educators, and serving as a valuable template for school improvement efforts. But some observers, like Kirst (1983) and Finn (1984) have expressed concerns that policy-makers are responding to the research with increased standardization, more mandates, and top-down approaches to change, and are ignoring the more complex issues raised by the research. Raising standards, changing time allocations, or aligning curricula may be beneficial policies but such policies may *not* create the sense of a shared moral order, the press toward excellence, or the collegiality characteristic of successful schools.

A second limit on the utility of this research is that policy-makers tend to rely more on common sense, personal experience, casual observation, public opinion, and other sources of "ordinary" knowledge than they do on social science research. One reason for this apparent contrariness on the part of policy-makers is that social scientists seldom agree among themselves and they often fail to deliver the scientifically verifiable knowledge they promise. They seek, and policy-maker audiences have expected, universally valid propositions in the form of "action X will generate a gain of Y on a measure of stu-

dent outcome Z." But such results are rare except in limited areas of economics and psychology (and this is arguable). Social science research typically produces inconclusive results in which causation is unclear and generalization is severely limited by the influence of contextual factors on the behavior studied. Paul Berman (1981), in reviewing research on school improvement, concluded that context was the dominant factor and that more research was needed on the specific conditions associated with success in specific settings. He called for the formulation of condition propositions of the form, "action A will produce result B under conditions C, D, E, and F."

In the case of the effective schools research, there is a great risk of over promising. The research often is presented, and accepted, as a set of verified and universal propositions that will produce results in the form of higher academic achievement, and do so without significantly increasing the costs of education. This is a misrepresentation of the nature of the research and a misunderstanding of its essential message.

What then can be expected of the effective schools movement? How will it influence the course of reform in secondary education? Social science research findings are most valued when they confirm beliefs already held. This somewhat cynical but undoubtably correct proposition helps explain the great interest in the effective schools research. The enthusiastic response to the findings is in part due to their positive, optimistic character, but it is also because educators and laypeople feel the research community is finally speaking their language. After all, who can quarrel with recommendations to emphasize academics, set high standards, or encourage educators to assume greater responsibility for results? The research findings generally coincide with the views held by informed members of the public.

The effective schools research may be used to justify politically popular actions that may or may not have much impact on the quality of education—increasing the length of the school day, for example. But it also can be used to develop new indicators of quality, to conduct self-evaluations, to critically examine proposed reforms and assess their potential costs and benefits, and to focus attention on neglected issues such as the conditions of teaching and learning and their relationship to the management and structure of schools.

EFFECTIVE SCHOOLS RESEARCH AND SECONDARY EDUCATION

Most of the reviewers of these studies express some skepticism about the application of the emergent "theory" of school effectiveness to secondary schools. (Cohen 1983; D'Amico 1982; Firestone 1982; Rutter 1983). They note the limited number of studies of secondary schools, the use of a narrow range of learning outcomes, the differences in the populations served, and significant organizational differences between elementary and secondary schools. Only two major studies, the study of London secondary schools by Michael Rutter and his colleagues and the comparative analysis of public and private secondary schools in the United States by James Coleman and his associates, have attempted a systematic analysis of school variables contributing to student outcomes. The results, however, have been interpreted as being strikingly similar to the findings from elementary school studies (MacKenzie 1983). The same factors appear to be related to effectiveness in both types of schools.

But even if the critical constructs associated with effectiveness are the same, their meaning in practice is likely to be different because of differences in structure and organization in the two levels of schooling. Comparing elementary and high schools, Firestone and Herriott (1982; 1984) found high schools had:

- less consensus about goals;
- fewer formal rules (except for non-instructional activities);
- greater teacher autonomy;
- less influence by principals over policy;
- less communication among staff members; and
- more administration-teacher conflict.

They concluded that high schools were more loosely coupled, less bureaucratic, and had less centralized authority over curriculum and policy.

In addition to these organizational differences, there are differences in educational goals. Secondary schools, with the exception of middle schools, focus on the development of higher-order skills, mastery of content in the disciplines, and vocational preparation. The basic skills are important building blocks but they are not usually central to the instructional mission of the high school. Indeed, successful high schools often are able to assume that the basic skills have been mastered by their students prior to enrollment.

There are other critical organizational differences. High schools tend to be larger institutions in which administrators are faced with greater spans of control. Parents tend to be less involved in high schools then in elementary schools. Teachers are more likely to be content specialists and more strongly influenced by peers in their disciplines than by administrators. Students in high schools are older and do not accede automatically to the wishes of adults. Order and work demands must be negotiated in secondary schools. Peers become powerful competitors to adult authority. Students are more aware of their interests and may become more critical of the link between these interests and curricular options. In addition, their interests are strongly influenced by the social and economic environment in which they attend school. Secondary students also have more freedom, more mobility, and more options. In sum, motivation to perform school tasks is likely to be even more problematic and varying than it is among their younger siblings.

These factors could influence organizational effectiveness directly or indirectly, and they suggest that the research findings on elementary schools can be applied to secondary schools only with caution. Even if the core propositions apply, their expression in practice is likely to be different. The problem of elementary school success may be on the verge of becoming a mere technical problem, but achieving success at the secondary level is more complex and more likely to be influenced by a historically defined set of circumstances —economic opportunities, social norms, public policies, and so forth—that are beyond the scope of the school.

SELECTING CRITERIA OF EFFECTIVENESS

How should the effectiveness of secondary schools be judged? What criteria should be used? The National Council for Effective Schools defines an instructionally effective school as one which meets the following criteria:

1. high and sustained overall achievement when compared to state and national performance;
2. no significant difference in achievement of children from different socioeconomic or ethnic groups—within or across schools; and
3. measurement of achievement in reading, language arts, and mathematics.

Most of the studies of effective schools have used similar criteria to classify schools. Further, they have relied heavily on standardized tests of basic skills as

the measure of achievement. Indeed it would be proper to refer to them as "effective basic skills schools."

Clearly these criteria are inadequate for the assessment of effectiveness in secondary education. Numerous reviewers of this research have noted this problem (Brookover 1980; Cohen 1983; Madaus, Airasian, and Kellaghan 1980; Rutter 1983) but there is little agreement about the criteria that should be used. Brookover (1980), in reviewing the literature on effective secondary schools, defends the use of measures of basic skills, arguing that the basic skills are the primary criterion as they are the foundation of all learning. But, in deference to the broader mission of the secondary school, he suggests ". . . some knowledge of the sciences, social sciences, and humanities" be added as additional criteria.

Basic skills tests are rejected as criterion measures by Rutter (1983) on the grounds that they do not fit the mission of the secondary school. It does seem inconsistent for advocates of the effective schools "theory" to contend that curricular alignment is an important factor and then select a criterion measure that is not aligned with the curriculum of the schools being assessed. Rutter also disagrees with Brookover and the National Council for Effective Schools about the use of an equity criterion on the grounds that schools serve only a marginal role as agencies for reducing social inequality. It is unlikely, he argues, that changes in schooling will significantly alter achievement differentials unless the education of the most advantaged students is restricted or impaired. As alternatives, Rutter proposes seven criteria: scholastic achievement, classroom behavior and discipline, absenteeism, attitudes toward learning, continuation in education, employment, and social functioning.

In his reexamination of the Coleman study of public and private secondary schools, Etzioni (1982) contends that character formation should be a primary criterion. Gerald Grant (1982) has reached a similar conclusion based upon his study of high schools.

Newman, Smith, and Wehlage (1983) defined five outcome domains for their proposed study of high school effects. Noting serious problems of measurement, conceptualization, and disagreement about purpose, they suggested basic literacy, academic knowledge, higher order thinking, vocational competence, and social maturity as domains to be assessed. If these are the major outcomes of secondary schooling, does not it follow that they should be the basis for developing criteria of effectiveness?

The U.S. Department of Education used 14 school attributes drawn from the effective schools research and 5 outcome variables to help select secondary schools for national recognition. The outcome variables were the number of students going to post-secondary education, student participation in academic competitions, performance on minimum competency tests and standardized tests of achievement, and drop-out rates (U.S. Department of Education 1983).

Taking a different approach, the Ford Foundation (1984, 2) identified the capacity to address and solve educational problems as a key criterion in its school recognition program:

> The central organizing concept was to recognize accomplishments and gains—not just improved achievement scores and academic growth, but also success in raising student attendance, reducing truancy and drop-out rates, increasing participation in extra-curricular activities, easing racial tension, involving parents and community, and generally enhancing the quality of student life.

To identify successful schools for early adolescents, Lipsitz (1984) defined seven "non-negotiable" criteria. These minimum expectations for successful schools were: scores on standardized achievement tests at, above, or approaching the district or county means; low absentee rates among staff and students; low incidences of vandalism; little or no destructive graffiti; low suspension rates; high parental satisfaction; and reputations for excellence.

This brief review of criteria of effectiveness for secondary schools suggests something of the range of opinion on the subject and the likelihood of reaching any consensus on the question. The reader probably could add to the criteria listed above. For example, no mention has been made above of the development and demonstration of skills in the arts or in athletics, but these outcomes are important to public judgments about the quality of schools. The fact is that the American public expects its schools to pursue excellence in all of these areas—and others. The public regards social, personal, vocational, and intellectual purpose of education as important. The most appropriate criteria will vary somewhat from one community to another. Effectiveness is a construct, an abstraction that has no objective reality. It cannot be defined precisely because it means different things to different people.

Nevertheless, some general guidelines can be offered for selecting criteria to judge the effectiveness of secondary schools:

1. Multiple criteria should be used in order to cover the broad mission of the secondary school and to avoid distortions.
2. Insofar as possible the criteria should include measures of achievement in the major curricular areas and these measures should fit the school's academic goals.
3. Indicators of "civility," prosocial behavior, or the absence of antisocial behavior should be among the criteria used.
4. The criteria may include both student outcome measures and indicators of school processes but the latter should be demonstrably related to student outcomes.
5. The time frame for assessing effectiveness should be at least three years in order to provide evidence of sustained success.
6. Whenever possible multiple referents should be used, that is, performance should be compared to past performance, to performance of similar schools, and to state and national norms or standards.
7. The criteria for schools serving early adolescents should reflect the developmental needs of this age group.
8. The performance and academic growth of students in different curricular programs should be examined and differences by gender, race, or ethnicity analyzed. Time series data should be used to show changes in both the distribution of opportunity and performance.

The issue of organizational effectiveness will not go away. People will continue to make judgments. In fact, the public has less difficulty with such judgments than researchers or educators. If direct evidence of success is not available, they will use whatever surrogates are available, including rumor and anecdote. Unfortunately, the public will not withhold its judgments until solid evidence is available, and often will apply criteria that are unrelated to organizational effectiveness. The best cure for this problem is the regular provision of good data in a comprehensible form.

STUDIES OF SUCCESSFUL SECONDARY SCHOOLS

Recently there have been a number of studies of the American secondary school. Some of these studies have involved the systematic collection of data about the schools; others have drawn upon expert opinion or used techniques of social criticism or journalism. Some have attempted to examine the relationship between specific characteristics of the schools and student outcomes; others have not. In a review of 28 such studies, Newman and Behar (1982, 8) concluded:

> Research on schooling typically lacks information powerful enough to support confident causal statements ("Schools of a particular type produce particular learning outcomes."), longitudinal claims ("Between ninth grade and graduation, students learn the following . . ."; "Schools with certain features maintain consistently high performance over several years."), or even valid claims of a comparative nature ("Public schools differ from private schools"; "Minority students may have different learning styles from majority students"; "Small schools have different effects from large schools"). Based on the projects' designs, we assess their potential for increasing descriptive knowledge in each of these ways. Almost half of the projects are not likely to contribute to a systematic study of cause, historical (longitudinal) change, or comparison, although they will produce general narratives and calls to action.

The available research on secondary schools suffers from serious flaws that limit the utility of the findings. Most of the well-known studies have one or more of the following problems: a lack of longitudinal data, a narrow definition of outcomes, a small sample, the use of either observational or survey methods but not both, or the failure to collect data on individual student learning outcomes and the school activities that may affect them (Newman, Smith, and Wehlage 1983). As a result, research on secondary education has not provided powerful generalizations to guide policy. This is one reason why the generalizations drawn from the effective schools research have been so attractive to policy-makers frustrated by the ineffectiveness of many secondary schools.

Yet there is a growing literature on secondary schools that examines the policies and practices associated with school effectiveness or school success. While limited and seriously flawed, it is of interest to those faced with the necessity of making decisions. The results of such studies can guide program design even if they do not provide the strong empirical propositions needed for good theory or good policy. The requirements for design parameters are less demanding. Propositions need not be universally true; they merely must serve as guideposts to critical issues. Good design requires a comprehensive framework and means of generating alternatives for consideration.

It is in this spirit that five studies have been singled out for special review in this paper. They include a study of basic skills effectiveness in 17 California high schools conducted by the Office of Research in the California Assembly (1984), the analysis of public and private schools conducted by Coleman, Hoffer, and Kilgore (1982) using data from the High School and Beyond survey, 6 case studies of public and private high schools by Lightfoot (1983), 4 case studies of middle schools by Lipsitz (1984), and the study of 12 London secondary schools by Rutter, Maughan, Mortimore, and Ouston (1979). These five studies represent early, and disparate, efforts to identify the charac-

teristics of effective or successful secondary schools. The findings from these five studies will be compared to the general effective schools framework presented earlier. (See Figure 1.) The amount of empirical evidence for each of the 13 dimensions will be reviewed. This review will be based upon findings from the five selected studies but it also will draw upon other research on secondary schools and on an ongoing analysis of high schools selected for national recognition by the U.S. Department of Education in 1983 (Corcoran and Wilson, in progress).

The five studies listed in Figure 2 met the minimum criteria for inclusion: systematic research methods were used in a general study of secondary school effectiveness, and specific school policies and practices were related to school success. These criteria resulted in the exclusion of "studies" such as those by Boyer (1983) and Sizer (1984) because, however useful their recommendations may prove to be, their conclusions are based on impressions and expert opinion, not research. Descriptive studies of high schools such as those published by Goodlad (1983) and Cusick (1983) were also excluded because they provide little insight into the elements associated with success. Indeed, they paint a bleak picture of the typical high school, describing poor teaching, demoralized staffs, and inadequate working conditions. Other studies were judged to be too narrow, focusing on a narrow range of outcomes and on classroom success with a select group of students in a particular discipline. (For example, see Anderson 1970 or McDill, Meyers, and Rigsby 1967.)

The flaws and inadequacies of the selected pieces of research are apparent even from the limited information presented in Figure 2. Only two of the studies involved comprehensive analysis of secondary school effectiveness (Coleman, Hoffer, and Kilgore 1982; Rutter, Maughan, Mortimore, and Ouston 1979). The other three are more limited by sample size, method, or scope of inquiry.

Figure 2
Studies of Successful Secondary Schools

Study[3]	School[1] Type	Sample Size	Method[2] Data	Outcome	Longitudinal Design
California Assembly Office of Research (1984)	H.S.	17	0	Yes	No
Coleman, Hoffer, and Kilgore (1982)	H.S.	1345	S	Yes	No
Lightfoot (1983)	H.S.	6	0	No	No
Lipsitz (1984)	M.S.	4	0	No	No
Rutter, Maughan, Mortimore and Ouston (1979)	H.S.	12	0/S	Yes	Yes

Footnotes

1. H.S. = high school; J.H.S. = junior high school; and M.S. = middle school.
2. 0 = observation/case study; S = survey methods.
3. In following tables, studies are referred to by the first author only.

The High School and Beyond study of public and private schools conducted by James Coleman and his associates has been the subject of much controversy and has been criticized both for its methodology, the accuracy of its

reporting and analysis, and for not asking the right questions. (See Educational Research Service 1981 and two special issues of *Sociology of Education* 1982, *55* (2/3), and 1983, *56* (4), devoted to discussions of this study and its sequels.) Coleman's findings that private secondary schools were generally more effective and were more integrated have sparked a lively national debate. The study has stimulated additional research and reanalysis of the same data with some authors reporting no significant differences in the performance of public and private schools (Morgan 1983; Willms 1984) and others generally supporting Coleman's conclusions (Falsey and Heyns 1984).

Each of the 13 dimensions of effective schooling is discussed below. It is important that the reader remember that they represent a gestalt, and that in this case, the whole is more powerful than the sum of its parts. Rutter found that none of the specific practices identified contributed to student achievement as much as the entire set of practices combined. There is no simple cause and effect model here; the specific dimensions interact and often the explanations seem circular; for example, higher expectations promote greater achievement and achievement raises expectations.

School-site Management

The research on effective schools has focused on school characteristics and has generally ignored the role of school districts (Cuban 1984). Indeed, much of the research has been conducted in large districts in which central office bureaucracies are rightly or wrongly regarded as obstacles to excellence by building-level staff. In short, there has been a bias designed into the studies that favors school-site management. Edmonds often spoke of "maverick" schools that ignored district policies and procedures. None of the five studies of secondary schools examined this issue systematically, but three of the studies produced findings that support the notion of considerable autonomy at the building level.

Lightfoot (1983) noted that the principals and headmasters in the schools she studied had clear authority to coordinate and the power to take action in response to problems. The California study (1984) concluded that it was critical that someone at the high school, typically the department chairperson, have authority over curriculum, and that staff play a major role in curriculum design and review. This suggests considerable autonomy in this policy area. Lipsitz (1984) described how principals in several of the sites studied served as buffers against external interference and acted to project the philosophy and program of their schools. Autonomy was not so much granted as it was taken by strong leaders who protected their vision from the intrusions of a turbulent environment. Examination of data on the exemplary high schools also reveals an emphasis on building-level initiatives—particularly in the area of curriculum (Corcoran and Wilson, in progress).

> **Inference:** The issue here is what should be tightly controlled and monitored by the school district and what should be the areas of discretion and flexibility at the building level. Answers to such questions are dependent upon the context. Research findings indicate that school staffs need sufficient discretion to solve everyday problems, develop a sense of ownership, and coordinate activities. Clarity and balance are needed in the allocation of responsibilities. School-site management may be good practice but its operational meaning is not clearly defined by the research literature.

Figure 3
School Characteristics Associated with School Success

Rutter	Coleman	California Assembly	Lightfoot	Lipsitz
• a substantial nucleus of children of above average ability	• students taking more rigorous courses	• clear goals	• a clear and shared school ideology	• clarity about school mission
• staff consensus on aims and values	• students doing more homework	• staff sharing common sense of purpose	• leadership fitting the culture of the school	• clearly articulated and shared goals
• consistent policies and procedures	• higher standards in grading	• high expectations for performance held by principal and staff	• awareness of imperfections and willingness to search for solutions	• a sense of being special as a school for early adolescents
• high expectations of academic success	• higher rate of attendance in grading	• greater use of data to assess progress	• clear authority to solve problems and create means of coordination	• strong instructional leadership
• students actively engaged in learning activities	• less class cutting	• more frequent use of diagnostic instruments	• respect for teachers and teaching	• a coherent philosophy and clear school mission
• frequent use of direct praise and frequent feedback on performance	• fewer disciplinary problems	• responsibility for curriculum located in the schools	• high quality teachers	• a principal with vision who supports staff
• teachers modeling desired work norms	• discipline perceived as fairer and stricter	• ongoing curriculum review involving teachers	• greater autonomy for teachers	• respect for staff as professionals
• clear guidelines for student behavior	• greater teacher interest in students	• expansion of course offerings and frequent curriculum revision	• fearless regard for adolescents and awareness of student values	• an orderly and caring environment
• students held responsible for personal behavior and school duties	• higher levels of student self-esteem	• district support	• a safe, regulated environment for teacher-student relationships	• a climate of positive attitudes and high expectations
• discipline infrequent but firm	• greater press for students to go to college	• faculty agree on instructional methods	• a sense of community	• reciprocity in human relations
• homework frequently assigned and marked	• smaller total enrollment	• autonomy to solve school problems	• concern for the weakest members of the school community	• pleasant physical setting
• teachers available to be consulted, willing to provide personal assistance, show concern for students	• high participation in extracurricular activities			• high levels of work effort by staff
• shared activities between staff and students				• encouragement of staff ingenuity
• high proportion of children holding positions of responsibility				
• pleasant working conditions for staff and students				

Figure 4
Dimensions of Effective Secondary Schooling

Organization-Structure Variables	California Assembly	Coleman HSB	Lightfoot	Lipsitz	Rutter
1. School-site management	S	—	S	S	—
2. Instructional leadership	X	—	S	X	—
3. Staff stability	—	—	—	—	—
4. Curriculum articulation and organization	S	—	—	—	—
5. Schoolwide staff development	—	—	—	S	—
6. Parental involvement and support	—	—	—	S	—
7. Schoolwide recognition of academic success	—	S	S	S	S
8. Maximized learning time	—	S	—	—	X
9. District support	X	—	—	—	—
Process Variables					
1. Collaborative planning and collegial relationships	S	—	X	X	X
2. Sense of community	S	—	X	X	X
3. Clear goals and high expectations	X	X	X	X	X
4. Order and Discipline	—	X	X	S	X

Footnote

S—indicates some evidence indicating support.
X—indicates a strong finding verifying the importance of a dimension.

Instructional Leadership

Three of the five studies identified instructional leadership as a critical factor for school success, but the researchers also found that the form of the leadership varied. In the schools studied by Lightfoot (1983) and Lipsitz (1984), principals played critical roles in articulating the school ideology; in setting goals; and in selecting, motivating, and supporting the staff. The strength of leadership in the building may be linked to the issue of school autonomy. Principals who lack discretionary authority may not be able to build a distinctive school culture or create a strong sense of community. Both researchers noted that it was important that the culture of the organizatio.. and leadership style match.

Research on the role of the principal in successful high schools is sparse. In a recent review of this literature, Firestone and Wilson (1983) suggested that principals seek to overcome the "loose-coupling" in schools by manipulating both bureaucratic and cultural linkages in the organization. The former are the rules, procedures, and authority relations in the organization, while the latter refer to norms, symbols, rituals, and stories. The authors admitted that it was not clear how altering a school's culture affected instructional effectiveness. They noted that it was common to find that "turn-around" schools had improved discipline and climate, but less common to find significant changes in levels of achievement. Principals can influence instruction by informing decisions on class size and composition, grouping, resource allocations, time allocations, and the use of knowledge and skills of the staff. Further, they may be able to shape the learning and teaching environment through the manipula-

tion of organizational culture: by telling stories, creating symbols and ceremonies, communicating norms, and serving as role models (Firestone and Wilson 1983). Yet the scant evidence available indicates that secondary principals have less influence over classroom instruction than their elementary counterparts (Firestone and Herriott 1982).

Leadership may also be provided by department chairs, teachers, or central office personnel. There has been little systematic study of the roles such individuals play and how their behavior affects the role of the principal and the overall effectiveness of the organization. One recent study, however, reported that they did not often play leadership roles and that their roles are poorly defined (Hall and Guzman 1984)

> **Inference:** Everyone agrees that visible and active instructional leadership is important to school success but there is no clear pattern to guide principals or others in potential leadership roles. Research provides no precise definition of the principal's role. What is clear is that it is different in secondary schools and that successful styles vary with the context. The question to be asked is what type of leadership can create the conditions described by the successful schools literature in a particular setting.

Staff Stability

This issue was not directly examined in any of the studies. The schools studied by Rutter experienced high staff turnover. Examination of data on exemplary high schools suggests a pattern of highly stable leadership and low staff turnover. Some of the schools face a problem of an aging staff and an inability to recruit new talent due to declining enrollments. Some turnover may be desirable to bring new ideas and new energy on board, and it may be absolutely necessary in cases where questions of competence or commitment arise.

> **Inference:** Little is known about the impact of staff stability on school effectiveness. It may be an effect as well as a cause of success. Whether it is beneficial obviously depends on the quality of the staff.

Curriculum Articulation and Management

Only the California study examined the management of the curriculum. The authors concluded that careful curriculum management and regular curriculum review were essential. But other studies have documented the importance of curricular alignment (Stallings 1984) and the need to bring some order to the curriculum in secondary education (Kirst 1983). Analysis of information on exemplary high schools shows a strong emphasis on curriculum review although no information is available on the degree of curriculum articulation or alignment.

> **Inference:** The case for improving curricular management and for a more carefully aligned and articulated curriculum seems strong even though the question has not been addressed in general studies of secondary school effectiveness.

Schoolwide Staff Development

Evidence that staff development improves effectiveness is scant. (Griffin 1982) Neither the five studies nor data on exemplary high schools shed any light on this issue. Staff development in secondary schools is seldom school-

wide; most of it is done by individual teachers or in departments. But more interdepartmental staff development might help overcome the fragmentation influent in secondary schools and serve as a press for curricular integration, more uniform standards, and stronger consensus on goals. The key factors in successful staff development seem to be social interaction and dialogue about teaching (Little 1983).

> **Inference:** Increasing or altering staff development activities cannot be justified on the basis of school effectiveness research. New approaches are certainly needed and a few clues to their design will be found in this literature, for example, placing more stress on cooperation, community, collegiality, and collective responsibility in staff development programs, by selecting themes and content that bring people together and providing more opportunity to discuss common instructional problems or successful techniques.

Parental Involvement and Support

None of the studies directly addressed the issue of parental involvement and effectiveness. While parent involvement is generally assumed to be a positive factor (Henderson 1981), it has not been carefully examined in school effectiveness studies. One early study found that it was positively related to achievement in schools serving poor minority children, and negatively related in schools serving affluent children (Brookover et al. 1979). Salaganik and Karweit (1982), in a reanalysis of the Coleman study of public and private schools, speculated that parental choice of schools led to greater acceptance of traditional school authority by parents and students, higher consensus on goals and behavioral norms between home and school, and hence greater commitment to the school and to academic tasks.

The exemplary high schools selected in 1983 were characterized by strong parental support and by parental involvement in a limited range of school activities—tutoring, extracurricular programs, community service programs, and the like. Parental involvement in the form of active participation in instruction or in determining school policies or programs was less common.

> **Inference:** Parental support is extremely important to school success but the case for or against parental involvement in secondary schools cannot be made on the basis of the evidence reviewed here. Common sense suggests that it can be a strong positive factor but this may depend on the form of the involvement and the degree of consensus between the school and parents about goals, curriculum methods, and so on.

Schoolwide Recognition of Academic Success

There has been no direct examination of the influence of different types of school reward systems, recognition programs or academic incentives on achievement. Recognition and reward programs for students and staff are common in exemplary schools and are being implemented in many schools. Rutter reported that the frequent use of praise and clear feedback on performance were strongly related to overall achievement. Many of the elementary school studies have identified schoolwide recognition of academic success as an important factor (Corcoran and Hansen 1983).

Adolescents often choose to give their attention to opportunities other than academic work. Jobs, friends, sports, music, extracurricular activities, and sex compete for their attention. They often work hard in areas where re-

wards are immediate and concrete and where their internal or peer-defined standards of excellence are applied. Hence their motivation to concentrate on school is problematic. Appeals to future rewards (such as college or jobs) or adult authority ("Do it or be punished") are often ineffective. From this perspective, the provision of more immediate rewards and recognition makes good sense. The exemplary high schools have implemented many creative programs based on this reasoning.

> **Inference:** The research support for the efficacy of school-wide recognition of academic success is not strong but the anecdotal evidence is persuasive.

Maximized Learning Time

In this case, the studies of effective schools (Rutter et al. 1979 and Coleman et al. 1982) confirm findings from research on effective classrooms. Beginning classes on time, minimizing disruptions, reducing disciplinary problems, having better school and class attendance, increasing the amount of homework, and obtaining higher rates of engagement in academic activities are all related to higher achievement. An additional observation drawn from examination of exemplary high schools is that high rates of participation in co-curricular activities may also be a factor. If these programs reinforce or extend academic learning, increase contact between students and teachers, or help students bridge the gap between academic work and their interests, they can be powerful supplements to the formal curriculum.

An additional insight is that in exemplary schools teachers provide more tutoring and personal assistance. This is both because they give time, before or after school and during free periods, and because the existence of appropriate space, offices or learning centers, and fewer non-instructional duties create more opportunities. The critical difference between a mediocre school and a good one may not be in its time allocations but in the amounts of discretionary instruction provided.

> **Inference:** Policies and procedures that reduce the loss of instructional time are important. Even more important are work norms that reinforce beginning classes on time, not wasting class time, assigning homework, tutoring, and participating in extracurricular programs. Some of the behaviors that maximize learning time cannot be commanded, but they can be solicited and rewarded by thoughtful instructional leaders.

District Support

Only the California study verified the importance of district support. The lack of attention to this factor was noted above. Studies of school improvement have identified district support as a critical factor in implementing change (Crandall and Loucks 1983; Berman 1981) but research provides little guidance on the forms or amounts of district support that are related to school effectiveness. This is an area which requires more research.

> **Inference:** Districts are on their own on the questions of school autonomy and the best forms of central office assistance.

Collaborative Planning and Collegial Relationships

Three of the studies found evidence of collaborative planning and better relationships among staff and between teachers and administrators in more

successful schools (Lightfoot 1983; Lipsitz 1984; and Rutter et al. 1979). This finding is confirmed by other studies of successful schools (Little 1982) and research on school improvement (Berman 1981; Louis, Rosenblum, and Molitor 1981). Such conditions are not common in schools where people work in isolation and adversarial and competitive relations are common. Roland Barth concluded: "The nature of relationships among the adults who inhabit a school has more to do with the school's quality and character and with the accomplishments of its pupils than any other factor." (*Education Week* May 9, 1984, 24).

> **Inference:** Collaborative planning requires managers willing to participate and to listen. It also takes time. Collegiality takes time, as well. Teachers need opportunities to engage in dialogue about curriculum and instruction. School boards and school administrators must come to the realization that organizational health requires the provision of such opportunities and that it will not threaten management prerogatives or detract from instruction.

A Sense of Community

Teachers often feel isolated and lonely. They frequently feel victimized by students, parents, and administrators. Often, they are held in low esteem and receive little respect. These are sources of stress and obstacles to productivity. In successful schools, the reverse appears to be true. Teachers are respected, relationships are supportive and reciprocal, and there is a strong sense of community. Four of the five studies affirmed this finding. Chester Finn (1984, 519) described the phenomena this way: "Members of the school community share a belief structure, a value system, a consensual rather than a hierarchial governance system, and a set of common goals that blur the boundaries between their private and organizational lives."

> **Inference:** Creation of a sense of community cannot be done overnight. It is the outgrowth of the collegiality and collaboration described above. But it is an important element in school success and should be held up as a value. The creation of community should be actively sought and actions that would jeopardize it avoided. In many places this will require both managers and teacher leaders to alter their styles and learn how to work together.

Clear Goals and High Expectations

All five studies confirmed this dimension. Other reviews of the research have stressed goal consensus (MacKenzie 1983) and Rutter, the California study, Lightfoot, and Lipsitz also confirmed that a shared philosophy or agreement on goals was characteristic of successful schools. Whether this was a true consensus or a "working" consensus is not clear and may not be important.

The meaning of high expectations is not always clear. As Lipsitz (1984, 186) observes, "We lack a reasonable vocabulary for describing the differential expectations held by teachers that enhance student capacity to learn." To speak of realistic expectations is often seen as racism or sexism. There is a tension between the push for higher standards and the need to motivate individual students. But it is reasonable to ask that expectations across a school be high. The resultant academic press may help everyone. Moreover, it is reasonable to ask that expectations not be linked to race, gender, or class.

> **Inference:** Setting clear goals is easy; using them is more difficult. Goals must be kept visible and be used to set prior-

ities and allocate resources. Expectations must be shaped. Standards are the outward manifestation of expectations. If they are low so are expectations. Raising standards and expectations is an incremental process in which demonstrated success plays a critical role.

Order and Discipline

All five studies provided further support for the importance of a task-oriented, orderly climate. This has been a central theme of all effective schools studies. The reaction often has been stricter rules, tighter enforcement, and a more punitive atmosphere. But adolescents must learn self-discipline (Etzioni 1982). This requires structure but not an authoritarian atmosphere. Lipsitz (1984) says that young adolescents are not ready for the independence offered in most secondary schools and this leads to behavioral problems. The result is authoritarian control mechanisms which produce alienation.

Proper relationships must be defined in a school. Teachers must have the authority to keep order. But it is a climate of respect and responsibility that is desired, a climate in which adult-student relationships can be positive. School success is not likely to be fostered in a prison-like atmosphere.

Inference: Discipline is important but how it is achieved is equally important. Effective discipline may not be possible unless some of the other dimensions of successful schools are present or being addressed. Cooperation, consensus about goals and values, and strong leadership are needed to foster an affirmative discipline policy.

Other Findings

The 13 dimensions of school effectiveness do not capture all of the findings from the five studies reviewed. The research suggests there may be other dimensions to be added to the framework. Among these are:

1. **a strong academic emphasis.** Rutter found that enrollment of a core of academically able students was related to effectiveness and Coleman reported that students took more rigorous courses in the more effective schools.
2. **a high quality staff.** Lipsitz and Lightfoot noted the significance of the quality of the teaching staff and the processes of their recruitment. Rutter found that it was important that teachers provided good role models for their students in terms of punctuality, behavior, dress, care of the facilities, and so on. Both Coleman and Rutter identified good classroom management practices as important to school success.
3. **good working conditions for teachers and students.** Rutter, Lightfoot, and Lipsitz identified clean, safe, attractive physical facilities as important to attitudes and morale. They also noted that teachers were respected, listened to, and provided the discretion and autonomy needed by professionals.
4. **high levels of discretionary instruction.** Discretionary instruction refers to the amount of tutoring and personal assistance provided to students. Three of the studies (Rutter, Lipsitz, and Lightfoot) identified this as an important process variable. This appears to be confirmed by examination of information on the 1983 exemplary high schools.
5. **good teacher-student relations.** Lipsitz and Lightfoot

observed the importance of having teachers who liked and understood adolescents. Rutter and Coleman found better and more frequent student-teacher relations in more successful schools.

6. **high levels of student participation.** Rutter found that the proportion of students holding positions of responsibility was significant and Coleman suggested that the proportion participating in extracurricular activities might be a factor in school success. The exemplary high schools also were characterized by extensive co-curricular programs and high student participation.
7. **the use of data to assess progress.** The California study found more effective schools were clearer about indicators of success, used data to assess progress more frequently, and conducted diagnostic assessments of students more regularly.
8. **a bias for action.** Lightfoot described a "willingness to search for solutions" and Lipsitz observed that staff ingenuity was encouraged. The exemplary high schools reported many innovations, curricular revisions, and active efforts to address organizational problems.

These additional eight dimensions add to the emerging portrait of the successful secondary school. They also reinforce the general conclusion that the specific practices are less important than the work norms—the school "ethos" that integrates policies and practices into a concerned and caring community of academic workers. Some of the work norms associated with school success are:

- high levels of trust
- high expectations
- cooperation and collegiality
- high levels of discretionary effort
- a concern for student welfare
- a belief in improvement
- respect for teaching
- concern for the weakest members
- a sense of collective responsibility
- careful use of time.

These norms are often embedded in specific policies and procedures, but acceptance of them and adherence to them is due less to the presence of rules or regulations than the nature of the work culture. When asked about these behaviors, staff would probably reply, "That's just how we do things here." Purkey and Smith (1983, 440) concluded that ". . . there is a remarkable and somewhat disturbing resemblance between the traditional view of schools as serious, work-oriented and disciplined institutions where students were supposed to have the 3 R's and the emerging view of modern effective schools." Purkey and Smith apparently were disturbed because they inferred narrowness, rigidity, and a stress on control from the research. But as the above discussion suggests, successful secondary schools are modern workplaces, task-oriented to be sure, but supportive of initiative, creativity, and diversity.

Culture is by definition elusive, implicit, and taken for granted. But every organization develops a core set of assumptions, understandings, and implicit rules that govern daily behavior (Deal and Kennedy 1982). The norms described above are similar to those found in all successful organizations (Peters and Waterman 1983) and they are related to high productivity. They define the "shared moral order" referred to by Cohen (1983). Having a distinctive and

strong academic culture allows a school to impose its values on students and to enforce work and behavioral demands. (For more complete discussion of school culture, see Anderson 1982, and Rossman, Firestone, and Corbett, in progress.)

High schools, of course, do not have a single culture. Tracks, grades, peer networks, and extracurricular programs create multiple subcultures. But in a strong school, these subcultures accept the core values of the school and complement them. Programs that do not grab students tend to lose them. This is especially true for disadvantaged students. It is a tragedy that they often attend fragmented, weak institutions. A strong school culture provides a sense of social cohesion, of being special. Support is provided as well as direction. This is one of the main insights from the research on effective schools.

The effective schools research can be, and is being, used to justify tighter administration, less discretion, more control, and increased focus on narrow measures of success rather than on the improvement of the quality of worklife for staff and students (Pratzner 1984). Whether such actions are appropriate or not may depend on the conditions in the school and its stage of institutional development. Lightfoot (1983) suggests that schools develop into good schools in a series of six stages in which different concerns are addressed. These concerns are:

Stage 1. Safety and Security
Stage 2. Attendance and Discipline
Stage 3. Basic Skills and Graduation
Stage 4. Post-school Preparation and Individualization
Stage 5. Intellectual Growth and Performance
Stage 6. Leadership and Responsibility.

Unfortunately, the current thinking in the effective schools movement seldom goes past Stage 3. This reflects its origins in studies of urban schools, the narrow criteria of effectiveness applied, and the immediate improvement priorities in many schools, but it is an inadequate formula for long-term school success.

Neglected Issues

There are some critical issues of secondary education that have generally been ignored by the effective schools studies. Among these are the impact of the curricular paths, tracking, school size, and the social context of secondary education. These issues are beyond the scope of this paper. There is a vast literature on each topic but few careful studies of the relationship between variables in each of these areas and general school success. Clearly the structure of the curriculum, its appeal to adolescents, and its efficacy at promoting their intellectual development are important. But the long continuing debate over the value of vocational education reveals the difficulty of making curricular determinations on the basis of empirical evidence. There has been a similar debate over tracking. Research has been conducted for decades with equivocal results. Reformers see tracking as inequitable and argue against it. Educators find it a practical necessity given the diversity of student abilities and interests. Research does not provide a clear answer to the question of how to structure a program so as to optimize both high individual achievement and aggregate school achievement. Similarly, the size of schools has been identified as a factor in promoting student commitment, participation, and attendance (Barker and Gump 1964; Lindsay 1982). More careful examination is needed of the relationship between size and quality. Finally, the opportunity structure facing

adolescents outside of school, and after they graduate, influences their motivation, commitment, time allocations, and ability to remain in school (U.S. GAO 1982). Youths may choose to work or get pregnant. They may expect to go to college or to be unemployed. These social realities affect secondary school success and must be factored into future research. Studies that examine how successful schools adapt to varying conditions will help both program designers and policy-makers.

IMPROVEMENT OF SECONDARY SCHOOLS

Research has demonstrated that public secondary schools can be successful. Such results are not attained, however, by adopting technical gimmicks or incremental curriculum reforms. Significant improvement requires a reexamination of organizational basics: work norms, management, staff competence, standards, and so on. How can such changes be accomplished? In particular, how can they be achieved during an era of declining resources?

Fortunately, a decade of studies on improvement efforts and the diffusion of innovations provides some insights into the "do's and don'ts" of school improvement. The major obstructions to school improvement cited in the literature are:

1. The assumption that the problems of effectiveness are primarily technical and can be solved with new curricula or instructional techniques and the related assumption that this technology can be transported from district to district and school to school with little alteration (Berman 1981).
2. The lack of consensus about goals, poor internal communications, and weak incentives for cooperation that are typical of public secondary schools. These organizational aspects of schools make it difficult to spread a new practice within a school or to transfer an idea or technique from school to school. The larger the school or school district, the more severe these problems will be, which is why improvements often are easier to implement in small schools and small districts (Crandall et al. 1982; Miles 1981).
3. The assumption that improvement can be attained by training individual teachers or administrators who then will implement the new ideas in their schools with little or no support. This assumption underlies the enormous workshop industry in education and is one rationale for the many conferences and meetings attended by educators (Miles 1981).
4. The use of top-down approaches to decision-making and planning that often fail to involve the individuals who are closest to the problems, and fail to develop understanding or commitment among those who must implement the proposed changes (Berman 1981; Bassin et al. 1979; Louis, Rosenblum, and Molitor 1981).
5. Political interference during the implementation process from interest groups or board members or an abandonment of the program because a leader departs (Pincus and Williams 1979).
6. The lack of competent external assistance to school staff who must implement the program or the failure to provide such assistance for a long enough time period (Crandall and Loucks 1983; Louis, Rosenblum, and Molitor 1981).

These are some of the negative lessons from the research on school improvement. There are some positive findings as well. For example, it is now generally accepted that the individual school is the proper site for planning improvements. That is the place where the work of education is conducted and any changes in the work must be implemented by the staff of the school. Thus, it is not surprising that a number of studies have concluded that planning and problem-solving at the building-level are associated with successful implementation (Crandall and Loucks 1983; Louis and Rosenblum 1981).

A second lesson drawn from the same research has to do with the importance of participation. Full implementation of a new educational practice is more likely when teaching staff have been involved in the problem-solving and planning process (Louis, Rosenblum, and Molitor 1981). This is especially important for educators who have developed a healthy skepticism about new improvement efforts—and are still wondering what happened to last year's initiatives. These educators must be convinced there will be practical payoffs before they will invest their time and energy in new initiatives. They also must be convinced that the district or building leaders are serious about school improvement and not merely using rhetoric about improvement to enhance their public image.

Trust is a critical ingredient. The quality of the relationships in the school, between the principal and the teachers and among the teachers themselves, shapes the course of an improvement program. No new approach can work if people are unwilling to take risks and be responsible for its success or failure. But, risking requires trust. If people make an honest effort to try something new and are punished if their innovation fails to produce the desired results, the capability of the school and district to improve may be permanently damaged.

Organizational development offers an approach to school improvement that explicitly seeks to build commitment and overcome cynicism. At the same time, organizational development focuses attention on the examination of organizational culture (work norms, for example) and improvement of the systems and procedures used by the organization. Applied behavioral science and management science are combined to develop strategies to improve communication, build trust and cooperation, enhance an organization's problem-solving and decision-making capabilities, strengthen its planning processes, and establish collaborative working environments. A recent review of the use of organizational development in schools found it was effective in the limited number of known applications. The review concluded that organizational development strategies have great potential for use in schools (Fullan, Miles, and Taylor 1980). Organizational development can help restore a sense of community within a school, overcome the isolation of staff, and create the conditions associated with effective schools (Schmuck, Francisco, and Bell 1979). This approach may be particularly suited for use in high schools where organizational complexity, strong content orientation, disagreement about goals, and traditional patterns of thinking make change particularly difficult.

A fourth essential condition for school improvement is support from groups external to the school. Successful implementation appears to be much more likely when central office staff provide active support but are not overly directive (Berman 1981; Fullan 1982). Active approval by the district leadership and support from the community are needed for any program that takes time and resources and proposes to alter the experiences provided to students.

External support also includes technical assistance. Teachers typically do not have much contact with experts. A recent reanalysis of the Rand Corporation's Federal Programs Supporting Educational Change found that teachers involved in federally-funded programs receive little help with their implementation problems (Datta 1980). This study challenged the conventional

wisdom that external consultants are of little value—a claim often made to support arguments that teachers should be left alone to do their own development work. Two other recent large-scale studies of improvement efforts also found external assistance to be a positive factor in successful implementation (Crandall and Loucks 1983; Louis, Rosenblum, and Molitor 1981).

Are High Schools Resistant to Change?

It is part of the lore of educational research and development that high schools are more resistant to change than elementary schools. Studies of school improvement and change by Rosenblum and Louis (1979) and Berman and McLaughlin (1975) found this to be true, but the apparent rigidities were not explained. A number of explanations have been offered:

1. the larger sizes of the institutions;
2. departmentalization ("loose-coupling");
3. the dominance of content;
4. the larger proportion of males in the work force;
5. lower parental interest;
6. higher professional autonomy;
7. lower goal consensus and a lack of a school-wide perspective among staff;
8. the reduced role of the principal in instruction;
9. lack of accountability for results.

But high schools do change. During the 1960s and 1970s many new programs and policies were successfully introduced (Cusick 1981). Reforms that created new clientele or were more easily monitored were most successful. New programs, new course requirements, or changes in scheduling are examples. Reforms requiring teachers to use new content or new methods, or to work harder, were less successful (Tyack, Kirst, and Hansot 1980).

Recent examination of change in high schools reaffirms these conclusions. Hall and his colleagues (Hall and Guzman 1984; Hord 1984; Rutherford and Huling-Austin 1984) visited 18 high schools across the country. They found:

- there was a high rate of innovation
- most innovations were minor
- organizational and curricular innovations accounted for two-thirds of the changes
- there were no clear patterns in internal leadership of change
- department leadership was ineffectual.

They concluded that the notion that high schools could not change was a myth. They further concluded that many of the recently proposed reforms are of the types that high schools are able to implement.

Effective Schools Programs

During 1983, Farrar, Neufeld, and Miles (1984) conducted a snowball survey to identify school improvement programs in secondary schools based upon the effective schools research. They identified 39 programs in 25 states serving 2,378 buildings. There were 35 programs involving over 700 secondary schools and 23 of the programs were comprehensive schoolwide programs. The programs relied heavily on results of studies of elementary schools, citing Edmonds' work most frequently (Miles, Farrar, and Neufeld 1983).

The programs typically involved formation of a planning team, conduct of an organizational assessment, identification of needs, development of a plan, and creation of task groups to implement the program. The programs used approaches from the field of organizational development. The amount of external assistance, training, and cost varied widely. About half of the programs involved voluntary participation of schools and their staffs.

Impact data was only anecdotal as most of the programs were new. Most claimed success—"clear impact in about 60 percent of the schools." But no data were provided to support the claims. The analysts, nevertheless, found the impact information sufficiently impressive to reach an optimistic conclusion about the potential effects of these programs. Noting the problems of building interventions for secondary schools on a research base from elementary schools, they nonetheless were impressed with what the developers had done and with the amount of impact reported (Miles, Farrar, and Neufeld 1983).

Evaluations of programs in New York City (MEDARP 1984), New Jersey and Pennsylvania (RBS 1984), and a number of district programs (Purkey 1984; Fruchter 1982) also show promising but mixed results. Evaluators report serious implementation problems and some faculty resistance. There is little hard evidence of impact on school performance. Nevertheless, the processes have been successfully installed in many sites and some schools report an impressive list of accomplishments in terms of changes in policies, programs, or procedures. As Farrar, Neufeld, and Miles (1983) have observed, the examination of these programs raises more questions than it answers. The effective schools movement has unleashed a flood of energy and good intentions. Some creative programs are being put in place. They need to be monitored, shared, and improved, or their inability to meet expectations may produce yet another round of cynicism about public education and an irreversible loss of public confidence.

CONCLUSION

The effective schools movement is a positive development and it offers great promise for the improvement of secondary education. Its limitations must be understood, and the new knowledge gained from the efforts to design and implement programs must be used to refine the emerging theory. Research usually is put to two tests—truth and utility. In the case of secondary schools, it is not clear that the effective schools research satisfies the truth test, but it may nonetheless satisfy the test of utility (Firestone 1983). The research is encouraging educators to wrestle with important questions about schooling and that is in itself beneficial.

REFERENCE NOTES

1. **Reform and Research on Secondary Schools.** A brief historical review of proposals for the reform of American secondary education since the formulation of the Cardinal Principles of Secondary Education in 1918 is presented in the first chapter of A.H. Passow, 1984, *Reforming Schools in the 1980s: A Critical Review of the National Reports,* New York: ERIC Clearinghouse on Urban Education. This useful book also contains one of the more thoughtful critiques of the many recommendations found in 15 major reports and studies. Synopses of the major reports and their recommendations also can be found in J.L. Greisemer and C. Butler, 1983, *Education Under Study: An Analysis of Recent Reports,* Chalmsford, MA: Northeast Regional Exchange.

There have been many summaries and critical reviews of the effective schools literature. The best, and most often cited, synthesis is S.C. Purkey and M. Smith, 1983, Effective Schools: A

Review, *The Elementary School Journal 83*(4), 427-452. This article combines findings from studies of effective schools and studies of school improvement into a single conceptual framework. The authors are aware of the limitations of the research but also appreciate its potential and its practical value. There is a sequel by the same authors that examines the district's influence on school effectiveness and improvement; see S.C. Purkey and M. Smith, 1985, School Reform: The District Policy Implications of the Effective Schools Literature, *The Elementary School Journal 85*(3), 353-389. Both articles make important contributions to the development of theory in this field and also offer practical suggestions for those designing and implementing school improvement programs.

The research review by M. Rutter, School Effects on Pupil Progress: Research, Findings and Policy Implications, in L.S. Shulman and G. Sykes, eds., 1983, *The Handbook of Teaching and Policy*, New York: Longman, is another excellent source. Rutter examines the influence of important variables often neglected by other reviewers such as resources, school and class size, tracking, pupil participation and responsibilities, conditions of facilities, and student composition. Rutter also has a healthy skepticism about the capacity of schools to overcome the educational advantages associated with social class although he concurs that all children can benefit from more effective schools.

An important distinction between the technical and the cultural dimensions of effective schools is made in the review by M. Cohen, Instructional Management and Social Conditions in Effective Schools in A. Odden and L.D. Webb, eds., 1983, *School Finance and School Improvement: Linkages in the 1980s*, New York: American Educational Finance Association: Cohen's framework suggests parallels with a paradigm known as socio-technical theory used in studies of productivity and quality of worklife in private and public organizations. For an application of this theory to schools, see A.G. Wirth, 1983, *Productive Work in Industry and Schools: Becoming Persons Again*, Lanham, MD: University Press of America, and a 1980 article by the same author, Socio-Technical Theory: An Alternative Paradigm for Schools as "Good Work" Places, *Teachers College Record 82*(1), 1-13.

2. **The Limits of the Effective Schools Research.** Most of the efforts to review the literature on effective schools cite the many conceptual and methodological problems with the research but optimistically press for its application on utilitarian grounds. The best discussion of the conceptual, measurement, and methodological problems with the research is B. Rowan, S.T. Bossert, and D.C. Dwyer, 1983, Research on Effective Schools: A Cautionary Note, *Educational Researcher 12*(4), 24-31. The authors conclude that the literature provides a poor model for studying school effects and they suggest that it may be a risky guide for those designing school improvement programs.

3. **Effective Schools Research and Secondary Education.** This topic has received only cursory treatment in the literature on effective schools. A number of critics and reviewers have warned readers that generalizations based on studies of elementary schools should be applied with caution in secondary schools. The best discussions of why this is the case are found in W. Firestone and R. Herriott, 1982, Prescriptions for Effective Elementary Schools Don't Fit Secondary Schools, *Educational Leadership 40*(3), 51-53, and on pages 367-370 of S.C. Purkey and M. Smith, 1985, School Reform: The District Policy Implications of the Effective Schools Literature, *The Elementary School Journal 85*(3):

4. **Selecting Criteria of Effectiveness.** Most of the effective schools studies use narrow criteria of effectiveness, typically basic skills achievement as measured by standardized tests and the relationship of these test scores to the social background or ethnicity of the students. For useful discussions of the range of outcomes that might be considered in assessing the effectiveness of secondary schools, again see M. Rutter, School Effects on Pupil Progress: Research Findings and Policy Implications in *The Handbook of Teaching and Policy*, and J. Lipsitz, 1984, *Successful Schools for Young Adolescents*, New Brunswick, NJ: Transaction Books.

Since this chapter was written, the author has received a copy of *The Performance Report for California Schools* in which indicators of quality for high schools are defined. This document provides the best framework for assessing the effectiveness of high schools the author has seen to date. The material is available from the California State Department of Education, Office of Regional Services, 721 Capitol Mall, Sacramento, CA 95814.

5. **Studies of Successful Secondary Schools.** Good descriptive information on the characteristics of American high schools is found in E. Boyer 1983, *High School: A Report on Secondary Education in America*, New York: Harper & Row, and in J. Goodlad, 1983, *A Place Called School: Prospects for the Future*, New York: McGraw Hill. For a candid and condemning portrait of three "typical" high schools in a large metropolitan area, see P. Cusick, 1983, *The Egalitarian Ideal and the American High School*, New York: Longman.

The best single review of research on secondary education is found in F.M. Newman and S.L. Behar, The Study and Improvement of American High Schools: A Portrait of Work in Progress, paper prepared for the Wingspread Conference on Improving the American High School, Racine, WI, November 4-6, 1982. This paper summarizes 28 studies that were underway in 1982, including the well-known ones by Boyer, Goodlad, and Sizer. It also contains an excellent review of research on secondary education and a discussion of some of the difficult choices reformers must make.

The five studies analyzed in the text of this paper represent an enormous variety of research methods and conceptualizations of the successful secondary school. Each of the studies has major shortcomings as a guide to policy and practice. Taken as a group, they point most clearly to the need for largescale, longitudinal studies of secondary schools that are accompanied by and guided by work on better theories of organizational effectiveness.

6. **Improvement of Secondary Schools.** There is vast, growing, and sometimes dense literature on educational change and school improvement. In the author's view, the article by P.W. Berman, Educational Change: An Implementation Paradigm, in R. Lehming and M. Kane, eds., 1981, *Improving Schools,* Beverly Hills, CA: Sage, is a classic. Berman's admonitions about the importance of factors affecting implementation and the influence of local context on what works should be read by all who propose to develop "effective schools" models for universal application.

   There is increased interest in participatory approaches to school improvement and in the school as the unit and locus of change. The excellent review of the application of organizational development methods to schools, by M. Fullan, M.B. Miles, and G. Taylor, 1980, Organizational Development in Schools: the State of the Art, *Review of Educational Research 50*(1), 121-183, should be read by those beginning such programs.

   The most comprehensive work on school improvement is M. Fullan, 1982, *The Meaning of Educational Change,* New York: Teachers College Press. It offers good counsel to district and building staff charged with planning improvement programs.

   Finally, E. Farrar, B. Neufeld, and M.B. Miles, 1984, Effective Schools Programs in High Schools: Social Promotion or Movement by Merit, *Phi Delta Kappan 65*(10), 701-706, describes attempts to apply the effective schools research to high schools and discusses some of the problems inherent in these efforts.

THE ASSESSMENT OF SCHOOL EFFECTIVENESS

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The concept of organizational effectiveness is central to the practice of school management. Educational administrators often make judgments about the relative effectiveness of different schools, programs and employees, and they use such judgments to guide organizational planning, budgeting, and improvement. Despite this, social scientists have yet to resolve a number of fundamental issues related to the assessment of effectiveness. W. Richard Scott, a prominent organization theorist, speaks for many researchers when he concludes:

> After reviewing a good deal of the literature on organizational effectiveness, I have reached the conclusion that this [is a] topic about which we know less and less. There is disagreement about what properties or dimensions are encompassed by the concept of effectiveness. There is disagreement about who . . . should set the criteria to be employed in assessing effectiveness. And there is disagreement about what features of organizations should be examined in accounting for differences in effectiveness.

In this paper, what is known about organizational effectiveness is applied to the problem of how to assess *school* effectiveness. Three issues will be discussed:

- What should be measured in order to assess school effectiveness?
- How should measures of school effectiveness be constructed?
- What use can be made of measures of school effectiveness?

A central theme will emerge from this discussion: *The best method of measuring school effectiveness is unknown; therefore assessment should be undertaken in a spirit of inquiry.* From this perspective, the most important consequence of measuring school effectiveness is not necessarily the identification of "effective" and "ineffective" schools. Instead, the major benefits include a more thorough understanding of the purposes a particular school is striving to achieve, and a better conception of how it can achieve these purposes

THEORIES OF ORGANIZATIONAL EFFECTIVENESS

A useful way to begin our discussion is to review the general social science literature on organizational effectiveness and briefly apply it to the problem of defining school effectiveness.

The Social Science Literature

Social scientists view organizational effectiveness as a "theoretical construct." By this they mean that effectiveness is an analytic or mental abstraction that does not exist in any real sense. This is a difficult point to understand, even for social scientists, but it has very important implications for those who want to measure organizational effectiveness. Because effectiveness is first and foremost a theoretical construct, different theories of how organizations operate tend to yield very different lists of the characteristics of effective organizations and the factors presumed to make them more effective.

Fortunately, the wide diversity of effectiveness theories in social science can be subsumed under two general headings. These have been given various labels, but the most popular are the goal-centered view and the natural systems view.

The *goal-centered* view begins with the assumption that organizations are actively pursuing a set of goals. Using this perspective, an organization's goals are identified, and organizational effectiveness is defined as the extent to which an organization meets its goals. Thus, goal-centered theorists tend to perform assessments by developing and examining measures of organizational goal attainment.

The *natural systems* view, on the other hand, holds that most organizations are too large and complex to specify a finite number of organizational goals. Instead, organizations are seen as being primarily oriented toward overall organizational health and survival, and this is thought to depend on internal, organizational factors such as adequate resource mobilization, free-flowing communication, high morale, democratic leadership, and participative problem-solving structures. Thus, theorists who use the natural systems perspective tend to develop assessment instruments that focus on internal, organizational structures and processes.

Although the goal-centered and natural systems views are common in social science research, many researchers are beginning to recognize that an adequate understanding of organizational effectiveness requires attention to both the specific goals of an organization and to an organization's internal structures and processes. Thus, much current research on organizational effectiveness is a blend of both goal-centered and natural systems approaches. The goal of these newer studies is to develop theories of organizational effectiveness that allow us to understand how specific organizational structures and processes are related to the attainment of specific organizational goals.

Applications to School Effectiveness

The general approaches outlined above have often been applied to the problem of assessing school effectiveness. In this section, two major traditions of school effectiveness research are discussed, one that uses a goal-centered approach, and one that uses a natural systems approach.

PROGRAM EVALUATION

A good illustration of the goal-centered approach to effectiveness can be found in the recent literature on "effective" schools, a literature popularized by Ron Edmonds and extensively reviewed in this volume. This research, which has its roots in the tradition of program evaluation in educational psychology, begins with the (entirely plausible) assumption that schools are oriented toward the achievement of certain short-term instructional goals. As a result, followers of this tradition tend to measure school effectiveness by reference to standardized achievement tests, which are presumed to measure the attainment of school academic goals. Most recently, however, goal-centered theorists in education have moved beyond a simple concern with outcomes

and have begun to develop explicit theories of instructional effectiveness. These theories identify specific internal structures and processes that affect instructional outcomes in schools. As this has happened, many school evaluators have begun to develop measures of these properties and use these as indicators of school effectiveness. Thus, increasingly, assessments of school effectiveness are based not only on measures of instructional outcomes, but also on measures of time use, teaching practices, instructional leadership and climate, and the overall coordination of the instructional program—factors which research suggests are related to instructional outcomes.

THE SCHOOL SURVEY AND ACCREDITATION MOVEMENTS

In contrast to the relatively narrow emphasis on achievement outcomes is the approach of a much older tradition of school evaluation developed during the school survey movement of the 1920s and carried out today by accreditation agencies. Although it is difficult to argue that this older tradition is guided by an explicit theory of organizational effectiveness, today's accreditation evaluations nevertheless provide a useful illustration of how natural systems theorists can assess school effectiveness.

Like natural systems theorists, accreditation evaluations recognize that schools are complex organizations engaged in the pursuit of numerous goals. As a result, these evaluations tend to ignore measures of specific organizational goal attainment and focus instead on measuring internal organizational structures and processes. A good illustration of this approach is the North Central Association's (NCA) workbook for school evaluation. On page 69, the broad purposes of school evaluation are set forth: "In evaluating schools, . . . the difficulties involved in gathering product data . . . [force us] to concentrate on structural and process criteria."

In practice, this approach has led to the development of a list of twenty broad areas that evaluators can use to assess overall school quality. Included in the NCA workbook, for example, are instruments that measure staff quality and recruitment, the organization's decision-making processes, the breadth and nature of course offerings, various aspects of the instructional process, the psychological climate of the school (including the quality of human interactions), overall fiscal and district support, and the school's capacity for change.

What is School Effectiveness?

Our brief review suggests that there is no uniform definition of an "effective" school. Instead, definitions and measures of effectiveness follow from the particular theories espoused by evaluators, and evaluators espouse different theories. Thus, in education, goal-centered analysts have tended to concentrate on measures of instructional outcomes, particularly basic skills outcomes, when assessing school effectiveness. Natural systems theorists, on the other hand, have taken a broader view of school effectiveness and have tended to focus on a number of measures of internal, organizational structures and processes that they view as related to overall organizational health and survival.

The Diversity of Definitions

Having made these observations, we can begin to develop a number of conclusions about the meaning of the term, school effectiveness. As every educator knows, schools are accountable to numerous constituencies, and these constituencies all engage in evaluations of school quality. In recent years, for example, federal and state governments have hired social scientists to evaluate the effectiveness of schools and programs, and, like goals theorists, these evaluators have tended to measure effectiveness on the basis of achievement

outcomes. At the same time, evaluations are also routinely made by teams of professional educators during accreditation visits, and by district and school administrative personnel for internal planning or evaluation purposes. These evaluations often focus on measures of internal, organizational processes and structures. Finally, parents and students commonly make informal evaluations of school and teacher quality in their daily conversations about school experiences or when making enrollment choices.

AN ILLUSTRATION

The diversity of views about school effectiveness can be illustrated by briefly reviewing a study of secondary schools conducted during the late 1930s by a consortium of accreditation agencies. At the time, members of the consortium wanted to develop a set of procedures to assess the quality of schools. Recognizing the lack of consensus about definitions of school quality, the study group collected data on a number of different aspects of school outcomes and processes in 200 cooperating high schools. The data included: (a) measures of internal work structures and processes such as those espoused by natural systems theorists; (b) measures of the long-term goals of schools, such as the occupational and college placements of students; (c) overall summary judgments of school quality made by teams of professional educators, by parents, and by students; and (d) the results of standardized achievement tests. Although the study was conducted nearly fifty years ago, it remains one of the classic studies of school effectiveness, and there is little reason to expect that its results are out of date.

The study paints an interesting portrait of school effectiveness. For example, it was found that the overall judgments of school quality made by different groups of evaluators (professional educators, parents, and students) were weakly correlated to one another. That is, the various groups of evaluators tended to show little agreement about the quality of any particular school. Moreover, no group's overall judgment was highly correlated to the results of the standardized achievement tests used in the study. An apparent explanation for these findings is that each group of evaluators held a distinctive theory about the overall purposes of schooling. For example, the data showed that the overall judgments of parents and students were primarily based on the ability of schools to place students in colleges and occupations after graduation, a probable reflection of the American citizen's theory of schools as a route to upward social mobility. On the other hand, overall judgments made by the teams of professional educators who visited the schools in the study were based mostly on judgments about the quality of school administrative processes and resource mobilization, and probably reflected a theory of schools as professional workplaces. Thus, the different groups held different theories of effectiveness, and therefore arrived at divergent judgments about a school's quality.

These findings usefully illustrative our first conclusion about school effectiveness.

> **Conclusion 1:** Definitions and measures of school effectiveness vary depending on the underlying theories and values of evaluators. In practice, different evaluators have different theories and therefore define and measure school effectiveness in different ways.

Facing up to Diversity

To many, the numerous definitions of school effectiveness produce confusion, and a common tendency among both researchers and practitioners is to attempt to reduce the variety of potential measures of effectiveness in two

ways. One strategy is to use complex statistical procedures to derive a single, overall measure of school effectiveness. A second strategy is to choose a single theory of effectiveness and to hold to it while ignoring other possibilities. In this section, it will be argued that neither of these strategies is particularly useful and that it is more informative to recognize and capitalize on the diversity of theories of school effectiveness.

For a number of reasons, it is virtually impossible to obtain a single, overall measure of school effectiveness. Researchers have never succeeded in assembling all possible theories and measures of effectiveness at a single point in time, despite their expertise and copious resources. More importantly, however, even if it were possible to assemble all theories at a given point in time, theories of effectiveness change periodically, and today's relatively complete list of effectiveness factors can easily become tomorrow's outdated and incomplete list. Thus, in practice, most summary measures of effectiveness are incomplete, even when based on numerous measures and subjected to sophisticated and complex statistical analysis. This does not mean, however, that it is not useful to collect multiple measures of effectiveness (and to analyze these using complex statistical procedures such as factor analysis). Indeed, this practice is highly commendable. But the reason for engaging in this type of analysis is less to derive an overall or summary measure of effectiveness than to understand the interrelationships among different measures. For example, because schools pursue effectiveness in many areas, it is possible that the allocation of scarce resources to the improvement of effectiveness in one area can lead to decreased effectiveness in other areas. These kinds of "trade-offs" become more evident when school personnel have at their disposal multiple measures of effectiveness and when they examine the pattern of interrelationships among these various measures. Moreover, it is useful to ask different groups of people about a school's effectiveness and to examine the pattern of relationships that exists among their answers. In doing so, one may find that different groups value different aspects of effectiveness. Thus, an evaluator of school effectiveness must be careful not to oversimplify the complexity of schools as organizations or obscure many interesting and important questions about school effectiveness. These observations lead to our second conclusion.

> **Conclusion 2:** School effectiveness can be defined in many ways, and these definitions can change over time and vary among groups. Thus "effectiveness" should be measured by gathering multiple measures from numerous groups, and the interrelationships among these different measures should be examined.

Measuring School Effectiveness

In the preceding sections, we discussed various conceptions of school effectiveness. This led us to consider several dimensions of school structure, process, and outcomes that are included in various approaches to effectiveness, and gave us some direction about what to measure in an assessment (see Figure 1). In this section, we turn to the next step, how to measure the effectiveness of schools. This involves constructing specific measurement instruments that reflect our underlying theories.

When social scientists discuss effectiveness, measurement issues are generally addressed under the rubric of the "criterion" problem. Most dictionaries define a criterion as a standard or rule by which a judgment can be made. In assessments of organizational effectiveness, then, a criterion is a measure that is used to judge effectiveness, and for a particular measure to be used as a criterion, it must be shown to be empirically related to a goal of the organization being assessed. Thus, we use achievement test scores as criteria for

judging school effectiveness because we are willing to assume that these scores measure student learning and that student learning is a goal of schooling. Increasingly, measures such as the degree of instructional leadership within a school are also being used as criteria for judging effectiveness, because recent studies have found such aspects of organizational process to be correlated to school achievement scores.

What follows is a consideration of the many issues that confront those who attempt to formulate criteria for judging the relative effectiveness of organizations.

General Issues

Before organizational effectiveness can be judged, some preliminary decisions must be made about: (1) who or what is to be evaluated; (2) over what time period the evaluation is to take place; and (3) what standard will be used to determine effectiveness. These problems are considered in turn.

Figure 1

Properties of Schools That Can Be Measured

	Goal-Centered Approach	Natural Systems Approach
Organizational Outcomes:	Student Achievement in Basic Skills	Organizational Health and Survival
As Measured By:	Norm- or criterion-referenced achievement tests.	Morale, cohesiveness, innovativeness, adaptive ability, and accreditation status.
Structures and Processes Related to Outcomes:	1. Safe and Orderly Environment 2. Clear School Mission 3. Instructional Leadership 4. High Expectations 5. Student Time on Task 6. Overall coordination of the instructional program 7. Home-School Relations	1. Staff Quality 2. Overall Instructional Program 3. Psychological Climate 4. Organizational Climate 5. Interpersonal Relations 6. Communication Processes 7. Decision-making Processes 8. Resources and Facilities 9. District and Community Support

*Note. The dimensions of school effectiveness listed here are illustrative and are *not* a complete list of factors that can be measured. For more complete discussions of dimensions of effectiveness and specific measures of these dimensions, see the reference notes for this paper.

THE UNIT OF EVALUATION

We have already seen that organizations are complex. One aspect of this is the fact that organizations are composed of numerous people and subunits. This creates major problems for evaluators who have settled on the school as a unit of evaluation, for the effectiveness of a school derives, in part, from the effectiveness of its subunits.

A potential problem related to the use of schools as units of evaluation arises when subunit scores are averaged to make a total organizational score. Measures of overall organizational performance often mask important differentials in subunit performance. For example, in schools, high average scores on achievement tests can occur because some (but not all) sectors of a school's instructional program are working well. Thus, a school's Chapter 1 program might lead to unusually high learning outcomes for participating students, but other sectors of the academic program might not yield such outstanding outcomes. As a result, the high outcomes in this one program increase a school's average score.

A second measurement problem occurs because organizations contain subunits that perform different types of tasks. Under these conditions, it is difficult to ascertain the contribution of each subunit to some overall measure of organizational performance. For example, it is difficult, and perhaps not sensible, to attempt to analyze how the effectiveness of a school's food service unit contributes to a school's performance on standardized tests. When tasks are very different, it often makes more sense to evaluate the effectiveness of different units using different criteria.

Our discussion leads to the following conclusion.

> **Conclusion 3:** Because all subunits do not perform the same tasks equally well, and because many subunits perform different tasks, evaluators of organizational effectiveness often need to construct and examine measures of effectiveness on a subunit-by-subunit basis.

TIME PERIOD OF EVALUATION

The choice of a time period over which organizational effectiveness will be measured also must be considered. Schools, for example, can be judged on the basis of their ability to produce a number of outcomes, some of which occur relatively immediately and some of which occur only after long periods of time. Thus, one of the long-run goals of schooling is to allow students to succeed in life, for example, in their occupational or college performance. Obviously, the performance of schools on this outcome can be measured only after long periods of time have elapsed. Alternatively, schools can be judged in the short-run, for example, by their ability to contribute to students' standardized achievement scores at a given point in time. This involves measurement over relatively short time periods, as when fall to spring achievement growth is measured.

Another issue related to time frames for evaluation arises when the skills and behaviors necessary for producing desired results change over time. For example, research undertaken at the Far West Laboratory indicates that attempts by principals to improve the academic performance of schools take time and involve several different types of activities over a period of years. New principals often begin to improve instruction, not by concentrating directly on problems related to instructional delivery, but rather by concentrating on school discipline and the school curriculum. Only later do they turn to specific activities targeted to the improvement of instructional practices and outcomes. Thus, successful principals often engage in different activities

from year to year, and changes in instructional outcomes often do not occur immediately. These observations lead to another conclusion.

> **Conclusion 4:** Evaluators of school effectiveness should take into account whether they are evaluating short-run or long-run outcomes and whether the necessary skills or objectives being evaluated vary over time.

STANDARDS OF ASSESSMENT

A third set of issues in assessment are related to the problem of setting evaluation standards. Generally, evaluators choose among three types of standards in assessing organizational effectiveness. They can compare a given organization's performance to the performance of other organizations, to its own past performance, or to an absolute standard of performance.

The choice of a standard is critical to evaluation results: an organization that obtains a high evaluation when one standard is used might obtain a very different rating when a different standard is used. Unfortunately, no clear rules exist about which type of standard is appropriate. However, we can predict some of the likely consequences of choosing a particular type of standard. For example, when assessments are based on the degree to which an organization improves upon its past performance, high-performing organizations generally obtain worse evaluations then low-performing organizations. This is due to the pervasive statistical phenomenon called "regression to the mean." Second, absolute standards of evaluation create difficulties because they are often set so low that almost *all* units are judged effective or so high that almost *no* units are judged effective. Moreover, because there is no technical resolution to the problem of setting appropriate absolute standards, they are often set to minimize negative political or public relations consequences. Finally, comparative standards also create evaluation dilemmas. Often, an organization's performance is constrained by factors outside its control, and failure to take these constraints into consideration leads to unjustified evaluations. For example, when school communities have different resource bases, comparisons of schools on measures of resource mobilization are destined to favor schools in wealthy communities. Also, when schools are compared on the basis of test scores, those serving lower socioeconomic groups almost always compare unfavorably to those serving higher socioeconomic groups. Our next conclusion derives from these observations

> **Conclusion 5:** Evaluators can choose different standards for judging school effectiveness. But the different standards often yield very different evaluations of the same school. Moreover, no simple rule exists for determining which type of standard is most appropriate.

Technical Issues

With these general issues in mind, we can turn to some technical issues that confront evaluators who construct specific measures of effectiveness. Such instruments might be based on questionnaires, existing organizational records, or observational ratings. Whatever the specific form, a measurement instrument should have two properties: validity and reliability.

VALIDITY

As we have seen, organizational effectiveness is a theoretical construct that does not exist in a readily observable form. Instead, it must be measured indirectly through the construction of measurement instruments. The valida-

tion of an instrument involves a demonstration that it actually measures what it is supposed to measure.

Although recent discussions of measurement validity are complex and controversial, they suggest some procedures that practitioners can use to enhance the validity of their local measures of school effectiveness. A useful way to begin the validation process is by examining how well local measurement instruments reflect larger social science theories of school effectiveness. For example, different theories will suggest certain dimensions of organizational structure and performance that are encompassed by the term "effectiveness," and the measurement instruments in local use can be examined for the degree to which they purport to measure these theoretical dimensions.

Thus, an initial step in validating measures of effectiveness is the choice of one or more theoretical frameworks to guide the assessment. This can serve a number of purposes. First, it can force practitioners to avoid the use of personalistic or implicit evaluative criteria, especially those that rely on the summary judgments of so-called "expert" raters. Instead, evaluators can refer to a theory of how organizational structures, processes, and outcomes are related. In addition, practitioners can use this process to screen out "nonsense" theories that have little empirical support. Two results should follow. First, organizational members should gain a clearer understanding of the criteria by which they are being judged. Second, they can gain some insight into how their own organization works.

Once a theoretical framework has been chosen, local measurement instruments can be validated in a number of ways. First, the instruments should be examined for "face validity." For example, a panel of knowledgeable individuals at the school site—perhaps those who have participated in the choice of a theoretical framework for the evaluation—can be asked if the measurement instruments in fact appear to measure what they are supposed to measure. Thus, if the measurement instrument contains a number of items supposedly reflecting the theoretical concept of "expectations for learning," face validity is established when panel members agree that the items do indeed measure this concept. An equally important task is to establish the content or sampling validity of measurement instruments. High expectations for learning can occur in a number of different ways, and a valid measure of this concept should adequately reflect all of these. For example, high expectations might be indicated by graduation standards, avowed beliefs about the ability of all students to learn, and the presence of awards for achievement. A local measurement instrument should contain measures of these various attributes of schools.

A final stage in the validation of local instruments involves an empirical analysis (often using correlation coefficients) of the data generated by these instruments. If the measurement instruments in use are valid, they should yield empirical relationships consistent with the predictions made by the theoretical framework guiding the overall evaluation. For example, if an evaluation has been framed by a theory which asserts that high expectations for learning are positively associated with achievement outcomes, the correlations between local measures of expectations and local measures of achievement should be positive.

To this point, we have treated validity as a matter of correspondence between measuring instruments and theoretical concerns. But validity is also a matter of obtaining accurate information. A common problem in social research is that respondents tend to provide answers which they deem socially appropriate or "right," especially when they are responding to questions posed by superiors, or when they have a stake in the outcome of a study. A number of practical steps can be taken to avoid this. First, a spirit of inquiry, as opposed to evaluation, and assurances of confidentiality can ease tensions aris-

ing from the fear of providing incorrect or punishable answers. Also, careful attention to who collects data can increase validity. In some cases, impartial and unflappable researchers are to be preferred over superiors or coworkers.

The types of questions or observation techniques employed in assessments of effectiveness can also affect validity. For example, questions that ask respondents to report on the behavior or attitudes of others, particularly people they have little opportunity to observe, are not likely to yield accurate information. Moreoever, the language and format of questions can affect validity. Many questionnaires contain irrelevant or inexhaustive response categories, and both questionnaires and interviews can be framed in a language different from that used by respondents.

Our discussion of validity leads to the following conclusion.

> **Conclusion 6:** Measures of school effectiveness should be carefully validated. Valid measures will reflect theories of school effectiveness, demonstrate empirical relationships consistent with these theories, and yield accurate information. Careful attention to a choice of theoretical frameworks for assessments and to instrument construction and administration can increase validity.

RELIABILITY

Another property of good measurement instruments is reliability. Although measurement theorists have developed a strict mathematical definition of this term, we can offer an intuitive one: a measurement instrument is reliable if its repeated application to the same (unchanging) object yields consistent scores. Such consistency indicates that the measurement instrument is relatively free of errors and yields relatively "true" scores.

It is worth noting that reliability is more than a technical problem. When an assessment of organizational effectiveness is used to perform evaluations that lead to rewards or punishments, those being evaluated have a right to measures that are as reliable (*that is,* error free) as possible. In addition, reliable measurement is a prerequisite to adequate empirical investigations, since unreliability can introduce unwanted "noise" into an analysis and contaminate inferences made from data. In short, whether an assessment of organizational effectiveness is designed to evaluate employees or to gain a better understanding of how one's own organization operates, reliable measures are important.

There are a number of ways to test whether measures are reliable. These are discussed in virtually all introductory texts on measurement, and I will briefly mention only three types of reliability. One type, called "test/retest" reliability, is used to check the stability of scores derived from questionnaire or achievement test data. A second type, called "internal consistency," checks the reliability of scales derived from mutliple questionnaire items. A final type, called "interrater" reliability, is used to check the consistency of different individuals using the same rating forms to observe individual behavior.

There is a good chance that practitioners are currently using instruments that have low reliability. For example, practitioners are often concerned with the time demands they place on those involved in assessments and thus often attempt to design instruments that are short and quick. But measurement experts agree that longer and more redundant tests, questionnaires, or observation periods increase reliability. Unreliability and measurement error also occur when questionnaire items, directions to observers about scoring, or instructions to test takers are unclear. Thus, every effort should be made to train observers and reduce subjectivity in scoring procedures, to clarify questionnaire items, and to give clear instructions to those taking tests or filling

out forms. Pretesting of questionnaires and trial observations are useful in this respect. Finally, the setting in which an instrument is administered may contribute to unreliable measurement, especially when those who fill out forms or take tests are distracted or fatigued.

Our overall discussion of reliability leads to the following conclusion.

> **Conclusion 7:** Measures of school effectiveness should be made as reliable as possible, especially if they are to be used to evaluate and allocate rewards and punishments to individuals or groups. Careful attention to instrument construction and administration can increase reliability.

PRACTICAL CONSIDERATIONS

One final problem requires our attention. The particular instruments being used for an assessment, and the theoretical framework on which these instruments are based, should be analyzed for their *relevance* to the organizations and people being assessed.

The problem of relevance can be approached in two ways. First, assessments should never be undertaken simply because they are easy to do or fashionable. Rather, there should be a reason for engaging in an assessment, as well as a rationale for measuring specific aspects of organizational effectiveness. Thus, assessments should be concerned with goals that at least someone in the organization feels are worth meeting or with areas in which the organization is thought to be ineffective.

Using irrelevant or "nonsense" criteria for evaluation can have a number of negative consequences. Social scientists have established that individuals will attempt to score favorably on criteria that are used to evaluate them. The important problem, then, is whether those responsible for an assessment really want individuals or organizations to score well on the criteria they have selected. In organizational research, attempts by individuals to score well on nonsense criteria are often called "goal displacement" and "bureaupathology" terms which are meant to indicate that the use of irrelevant criteria can prevent organizational members from focusing on the more meaningful or important goals of the organization.

A second problem related to relevance occurs because multiple criteria and theories of effectiveness exist. In any given assessment, there is a strong possibility that organizations or individuals will be assessed on the basis of criteria which they are not attempting to meet. This often happens when the operative goals of an organization are at odds with formal assessment criteria, a situation that can easily evolve out of a number of circumstances. Although it makes sense to assume that organizations and individuals will ultimately "align" their operative goals to assessment instruments, especially if rewards or punishments are attached to assessment results, performance evaluation in the meantime will at least partly reflect the degree of mismatch between criteria and operative goals and thus will not be a true measure of what organizations and individuals are actually accomplishing. Thus:

> **Conclusion 8:** Measures of effectiveness should be examined for their relevance to both the desired and operative goals of an organization.

Illustration

We can illustrate this abstract discussion by giving some concrete examples drawn from experiences with assessment instruments and techniques currently available to school personnel.

MEASURING INSTRUCTIONAL OUTCOMES

One of the most intriguing aspects of the goal-based tradition in education has been the attempt by researchers to develop procedures for judging the instructional effectiveness of schools. Increasingly, measures based on student achievement scores have been used in both research and practice as criteria for identifying "effective" and "ineffective" schools. Unfortunately, these measures suffer from a number of problems mentioned above.

One problem is that measures of student achievement generally relate to short-term, basic skills outcomes, and are more relevant to elementary as opposed to secondary schools. As a result, measures of the higher order cognitive skills taught in secondary schools are generally not represented in research on school effectiveness, even in studies on high school effectiveness. An exception appears to be the use of Scholastic Aptitude Test (SAT) results to measure instructional outcomes in secondary schools; but the use of these results to evaluate schools is not recommended. First, this test was designed to predict the college performance of students on the basis of aptitude, and not to measure achievement. Moreover, since the test is not administered to all students in a school, school results are in part determined by the proportion and types of students who take the test. Thus, our ability to bring standardized achievement data to bear on the question of instructional effectiveness in secondary schools is often limited by test content and sampling problems.

More importantly, however, when achievement data can be used to assess instructional effectiveness, no agreed-upon standard exists for identifying schools as "effective" or "ineffective." For example, in reviewing the research on effective schools, my colleagues and I found four different standards used to measure instructional effectiveness: (1) absolute standards such as school mean scores or the proportion of students in a school scoring above or below the national median in achievement; (2) an analysis of trends in test scores at a particular grade level, such as whether test scores in the sixth grade of a particular school have been rising or falling over the past several years; (3) an analysis of gain scores for pupils in a particular cohort, such as whether this year's third grade gained or lost in national percentile ranking over the current school year; and (4) one of a variety of statistical techniques that generate residuals from a regression analysis, such as whether the average achievement in a school is above or below what is prediced on the basis of its demographic composition.

There are a number of technical problems with these measures. First, the various methods have low correlations with one another and thus tend to identify different schools as effective. Thus, the criterion one chooses to measure instructional effectiveness has a large effect on which schools are identified as effective. Second, many of these measures are extremely unreliable. For example, my colleagues and I examined the stability of instructional effectiveness measures based on trend analysis and on regression procedures. Using trend analysis, we found that schools with high gains in achievement one year had low gains the next year. Using regression analysis, we found that only 50 percent of the schools identified as effective in one year remained effective the next. Thus, from year to year, rankings of the instructional effectiveness of schools tended to vary markedly.

There are also difficult conceptual problems associated with the choice of a particular standard. For example, measures that use an absolute standard to assess effectiveness, such as examining school means, almost always prevent schools serving low income students from being labeled as effective. On the other hand, methods that examine cohort gains or that use regression procedures, control for student background and thus do not bias results against schools serving low income schools; but they do allow schools with low absolute scores to be identified as effective.

Available procedures for measuring instructional effectiveness also confront a unit of evaluation problem. For example, no agreed upon procedure exists for measuring the instructional effectiveness of an *entire* school, and too often, schools are labeled as effective after analysis of instructional outcomes at only one or two grade levels and in only one or two curriculum areas. Moreover, even within curriculum areas and at a single grade level, research has shown that schools are often not uniformly effective for all types of students. Thus, analysts of school instructional effectiveness need to examine data on effectiveness across the entire range of curricula, grade levels, and types of students, and over long periods of time.

Finally, there is an increasing debate about the relevance of standardized achievement tests to assessments of instructional effectiveness. Much of this debate centers around the relative merits of norm-referenced tests (NRTs) versus criterion-referenced tests (CRTs). One group of scholars has argued that NRTs provide a very general assessment of students' knowledge and understanding of a subject area and thus are useful to educators as evaluations that compare the instructional programs of schools. Others have cautioned against this use by arguing that NRT-based evaluations are too highly generalized to assess the extent to which a local program has met its specific objectives.

One way to understand the NRT versus CRT debate is to consider the concept of "curriculum alignment." This concept refers to the match between items on achievement tests and the specific objectives embedded within the texts and curriculum-in-use in a school system. Recent research demonstrates that NRTs often do not reflect local curriculum objectives, especially as these are embedded in texts, and that high degrees of mismatch can deflate students' scores on NRTs. Thus, when schools are ranked according to NRT results, the rankings are at least partly a function of the "alignment" between curriculum-in-use and the NRT used as a criterion.

Two practical strategies exist for coping with the alignment problem. One strategy is to align the curriculum-in-use to the test, either by changing curricula or by changing tests. By doing so, a school system will gain an advantage over comparison schools that are mismatched and thereby demonstrate improved NRT results. However, such "improvement" might not result from enhanced student learning; rather it can simply reflect the comparative advantage of aligned systems over unaligned ones. Moreover, practitioners must guard against aligning their operative instructional objectives to criteria that test publishers, but not local constituencies, consider important.

The problems associated with NRTs have led many local school systems to use CRTs for instructional assessments. This involves returning to the basic tenets of the goal-based approach to organizational effectiveness: instructional objectives are clearly specified and tests which sample these objectives are developed and routinely used. Such CRT systems are very useful for formative evaluations of student progress and for formative evaluations of instructional programs. However, since CRTs reflect local objectives, and since local objectives vary from school system to school system, CRT results are much less useful than NRTs for comparative evaluations of instructional effectiveness across school systems.

This discussion leads to the following conclusions.

> **Conclusion 9:** There is no consensus on which of the many standards and techniques for assessing instructional effectiveness is best. Instead, the choice of a particular procedure should be based on the purposes of an evaluation. A recommendation, however, is to devise procedures that construct longitudinal profiles of school academic performance at different grade levels, for different curricula, and for different sectors of the student body.

MEASURING SCHOOL PROCESSES

Increasingly, evaluators of school effectiveness are becoming concerned with measuring not only instructional outcomes, but also properties of a school's internal, organizational structures and processes. Traditionally, process measures have been based on a natural systems perspective and have therefore focused on such factors as communication and decision making. But, with the increased attention to theories and research on instructional effectiveness, a number of procedures have been developed recently to gather data on the quality of instructional processes in schools.

The measurement procedures used to assess organizational processes vary widely, and one or all of the following procedures can be employed: systematic and complex observational procedures developed in research on effective teaching and schools; structured interviews administered by trained interviewers; and self-response questionnaires. Questionnaires currently in use vary widely, especially in the extent to which they contain items that sample many or few theoretical domains from effective schools research, and in the type of response format they employ.

The practitioner interested in obtaining measures of school processes should carefully examine alternative assessment instruments and consider the trade-offs involved in using any particular one. Comparisons can be based on the degree to which the instruments are valid and reliable and the costs involved in their utilization. In general, procedures developed by researchers and shown to be correlated to outcomes tend to be much more valid and reliable measures of classroom and school processes than many of the slapdash questionnaires recently developed. But these instruments are also very costly to use since they require trained observers and multiple observation periods. Thus, gathering data on internal organizational processes involves trade-offs.

As an illustration, consider some of the different procedures that can be used to measure the amount of time students are "engaged" or "on-task," a process variable which researchers have shown to be related to instructional outcomes in schools. Researchers have developed a number of systematic techniques for measuring this aspect of instruction. These techniques often involve sending well-trained observers into classrooms to observe the behavior of specific students over long periods of time. By contrast, a typical school effectiveness questionnaire might contain an item that asks respondents to react (in a structured format) to the statement, "The amounts of time all students in this school spend engaged or on task is high (a minimum of 70 percent of the instructional period)." Obviously, since respondents lack systematic information on the behavior of all students in a school, the researchers' procedure is likely to yield more valid estimates on time-on-task. But the question for practitioners is whether they really need the kind of highly valid and reliable data that researchers use.

A reasonable answer to this question involves an analysis of the purposes of the assessment. If data on time-on-task are being used in a formal evaluation of a specific teacher, then the highly valid and reliable procedure for gathering data is to be preferred. On the other hand, when data on school processes are being used to identify potential areas for school improvements or to acquaint staff with new theories of effectiveness, lower cost and less valid procedures might be preferred. How much cost one is willing to devote to gathering data on school processes, then, is a function of the purposes of gathering the information and the uses to which the data will be put.

Interestingly, even if highly valid and reliable measures of school processes were easily accessible to practitioners, their use in constructing ranks of school effectiveness would be limited. This is because, to date, little work has been done on how to set standards that can be used to judge whether a specific

value on a measure of school process is "effective." This problem is not intractable, as we shall see, but it does lead to many of the same ambiguities that were encountered in attempts to set standards of instructional effectiveness.

An intuitive approach to standard setting is to set high effectiveness standards. Thus, if a questionnaire item on a particular school process—for example, time-on-task—contains seven response categories, with a response of one indicating low time-on-task and seven indicating high time-on-task, we could arbitrarily declare that a school needed a score of six to be effective. Alternatively, if data were available on a large number of schools, school scores on the time-on-task question could be normed much like achievement tests, and schools could determine the percentile ranking of their score on the continuum of scores for schools of their type (rural or urban for example). Finally, since it is assumed that time-on-task is related to achievement, a large population of schools could be grouped into categories of instructional effectiveness, average scores for time-on-task could be computed for these various effectiveness groups, and a given school could compare its score to the average score of instructionally effective schools. Attempts like this have been undertaken, but as yet, such standard setting is rare.

Our discussion leads to the following conclusion.

> **Conclusion 10:** School processes can be measured in a number of ways. Higher costs must be expended to make procedures more valid and reliable, but high cost instruments are not absolutely necessary unless assessments are used to evaluate and reward or punish personnel or organizations. A problem with this type of evaluation, however, is that standards for judging effectiveness on the basis of process measures have not been established.

USING MEASURES OF SCHOOL EFFECTIVENESS

The final problem considered in this paper is *how to use* measures of school effectiveness. We have already seen that a measure's use is partly determined by the purposes of evaluators. At this point, then, it is useful to distinguish between two types of evaluations. One type is designed to reward or punish employees or make decisions about program continuation. In the literature on program evaluation, this is often called "summative" evaluation, a term which implies that a program or activity has been fully implemented and is stable enough to have a summary judgment made about it. A second type of assessment, called "formative" evaluation, is designed for use during periods of organizational or program change, and is used to identify areas of program operations that need attention or improvement. It is my position that currently available measures of school effectiveness are most useful in formative evaluations.

This position is based on two assumptions. First, research, as well as common experience in schools, suggests that many of the most important aspects of school organization are very unstable. For example, students, personnel, and instructional materials and arrangements often change at a very rapid rate. This not only complicates the process of summative evaluation, but also creates a constant need for formative assessment. Second, our review of the problems associated with measuring school effectiveness strongly suggests that many measurement techniques lack the requisite methodological rigor for use in summative evaluations. Thus, in the sections below, summative uses are not considered—the focus is on formative uses of effectiveness measures.

Management Information Systems

One way to employ measures of school effectiveness in formative assessments is to incorporate them into a comprehensive management information system. A number of school districts and Regional Educational Laboratories have begun to develop systems like this containing a wide range of data that can be used for a broad variety of purposes.

The core of most management systems is information on student academic accomplishments. Thus, these systems include information on standardized test scores, and, more importantly, scores on curriculum-referenced tests, particularly tests which measure mastery of "key" skill areas. Some systems contain additional information, for example, data on the texts in use in a school system or dates when instruction in "key" skill areas has been offered. This information is often merged with other data routinely collected in school systems, for example, data on student demographic characteristics, absenteeism, truancy, or suspensions and expulsions.

An important feature of such information systems is their ability to provide information about various levels of the school system. For example, the information system's data-base can be used to examine student, classroom, school, and district-wide academic accomplishments. Thus, teachers and administrators can use the system to examine an individual student's academic performance, for example, during parent conferences, or as an aid to diagnosis and placement. At the same time, the data can be used to show the percentage of students in classrooms or schools that has mastered instructional goals. When this information is provided to teachers or school-level planning teams, it can help teachers and principals assess progress toward instructional goals and sequence activities across grade levels. Finally, when data on academic performance are merged with demographic data or data on textbooks, school or district planning teams can examine how well they serve various student populations or the strengths and weaknesses of various texts.

More ambitious school systems can supplement instructional information with data on school structures and processes. For example, data on course enrollments, class sizes, and teacher loads, as well as survey-based information on leadership and administrative processes, teacher morale and satisfaction, or decision participation, can be added to management information systems. When coupled with data on instructional outcomes, such information can give administrators a powerful and broad-based tool for assessing the impact of change on their school systems. For example, administrators who monitor this information over time can observe changes in instructional outcomes, administrative processes, or staff morale that sometimes accompany changes in programs, personnel, or policies. Administrators might also be able to detect ominous declines in morale or cooperation that accompany such turbulent political events as school board and bond elections, personnel changes, or contract talks.

Survey Feedback

Not every school system will want to invest in the kind of management information system described above. For these school systems, less time-consuming and costly strategies for using school effectiveness data exist. For example, one currently popular procedure is to administer school effectiveness questionnaires to members of a school staff and then to involve the staff in "survey feedback." This relatively low-cost procedure can be extremely useful for identifying school or program weaknesses and for setting improvement priorities.

Survey feedback is often undertaken in collaboration with a trained organizational developer and consists of three steps. The first step is development

and administration of a questionnaire. Most developers agree that organizational members should be active at this stage, particularly in the development of the instrument. Once the questionnaire has been administered and responses tabulated, the data are fed back to organization members, often in a series of group meetings that start at the top of the organization and move downward. These meetings can be a significant learning experience for participants. Patterns of interaction among group members can be analyzed and values conflicts in the organization can be openly discussed. Meetings can also be used to exchange theories of instructional effectiveness and instructional practices. But, more importantly, the meetings can also provide an opportunity for systematic diagnosis of organizational problems, and this leads to the final stage of survey feedback: action planning and continued follow-up addressed to the problems uncovered in the survey data.

A number of existing school effectiveness surveys can be adapted to local settings and used in survey feedback interventions. For example, one way questionnaires can be used to locate improvement priorities is to develop a particular type of response format. A question about teaching practices in the school, for example, can have two types of response options. First, respondents can be asked to rate the degree to which the practice is currently in use. Second, they can rate the degree to which the practice ought to be used. The analysis of returned questionnaires can then focus on discrepancies between what is and what ought to be. Practices which respondents perceive as being desirable but not widely in use, *and* practices which are perceived as being undesirable but widely in use, indicate areas that can be targeted for improvement or change.

CONCLUSION

Returning to the opening theme of this essay, the problem of measuring school effectiveness presents a number of challenges long before "effective" and "ineffective" schools are identified. Throughout this essay, I have tried to point out how the resolution of these problems can provide school personnel with an opportunity for inquiry. In developing measures of school effectiveness, school personnel can explore both theories of effectiveness and the relevance of these theories to their own local setting. In doing so, they can gain a better understanding of the goals of their organizations and the procedures used to pursue these goals. In using measures of effectiveness, school personnel can discover the underlying values and priorities of organizational members, and gain an opportunity to share techniques and improvement strategies with others. It is these learning experiences, rather than the identification and celebration of "effective" schools, that are the major benefits associated with measuring school effectiveness.

REFERENCE NOTES

1. **General Discussions of Organizational Effectiveness.** Two excellent books on organizational effectiveness are P.S. Goodman and J.S. Pennings, 1979, *New Perspectives on Organizational Effectiveness,* San Francisco: Jossey Bass; and K.S. Cameron and D.A. Whetten, 1983, *Organizational Effectiveness: A Comparison of Multiple Models,* New York: Academic Press. Both books contain numerous scholarly articles that discuss how to conceptualize and study organizational effectiveness, and both will provide the reader with extensive references for further reading. The quote from Scott in the text of this chapter can be found in Goodman and Pennings, pages 63-64. The article by John P. Cambell in the Goodman and Pennings volume is the best single review of work on organizational effectiveness this chapter's author has read.

2. **Specific Studies of School Effectiveness.** The most widely cited review of recent studies based on the goal approach is S.C. Purkey and M.S. Smith, 1983, Effective Schools: A Review, *The Elementary School Journal 83,* 335-352. An excellent review of earlier studies of school effectiveness can be found in G.F. Madaus, P.W. Airasian, and T. Kellaghan, 1980, *School Effectiveness: A Reassessment of the Evidence,* New York: McGraw Hill.

3. **Technical Problems in the Measurement of Organizational Effectiveness.** Many of the general points made in the text are dealt with in much more detail in sections IV and V of E.L. Struening and M. Guttentag, eds., 1975, *Handbook of Evaluation Research—Volume I,* Beverly Hills, CA: Sage; and in Chapters 17 and 29 of M.B. Dunnette, ed., 1976, *Handbook of Industrial and Organizational Psychology,* Chicago: Rand-McNally. These discussions do not deal specifically with educational assessment and are often highly technical, but for readers interested in references or a more thorough discussion of the issues presented in the text, these sources are good starting points.

4. **Constructing Measures of School Effectiveness.** A good introduction to specific techniques for measuring instructional effectiveness can be found in B. Rowan, S.T. Bossert, and D.C. Dwyer, 1983, Research on Effective Schools: A Cautionary Note, *Educational Researcher 12,* 24-31. This paper contains a large number of references to papers that show how to use achievement data to assess school effectiveness.

   Specific questionnaires based on recent goal-based approaches to "effective" schools can be obtained from a number of sources, including most Regional Laboratories. The two best instruments the author has seen, however, have been constructed by two SEAs. The Colorado State Department of Education, School Improvement and Leadership Services Unit, 201 E. Colfax Avenue, Denver, CO 80203 has produced a manual entitled Indicators of Quality Schools that is excellent. Also, Robert M. Villanova, William J. Gauthier, Jr. and colleagues at the Connecticut State Department of Education have produced an excellent interview procedure. The Connecticut School Effectiveness Interview. This instrument *requires* that those using the instrument be trained. For more information, contact William Gauthier. A lengthy and unorganized collection of 352 questionnnaire items that can be used to tailor-make local questionnaires about school effectiveness is The School Improvement Survey, available from Mid-Continent Regional Educational Laboratory, 4709 Belleview Avenue, Kansas City, MO 64112.

   Excellent sources on instruments based on a natural systems approach to school effectiveness can be found in *The NCA Guide for School Evaluation,* 4th edition, available from the Commission on Schools, North Central Association, 1540 30th Street, Post Office Box 18, Boulder, CO 80306; and R.A. Schmuck and P.A. Runkel, 1982, *Handbook of Organization Development in Schools,* National Press (or contact Center for Education Policy and Management, University of Oregon).

5. **Using Measures of School Effectiveness.** An excellent and non-technical discussion of how to use measures of school effectiveness in management information systems can be found on pages 43-45, 64-70, and 74-96 of *The Superintendent's Can-Do Guide to School Improvement,* available from the Council for Educational Development and Research, 1518 K Street, NW, Washington, DC. 20005. Also, the Southwest Regional Laboratory for Educational Research and Development (SWRL) has had considerable experience in providing local districts with support in curriculum alignment and the development of management information systems. For information, contact R.E. Schutz, Director, SWRL, 4665 Lampson Avenue, Los Alamitos, CA 90720.

   For a good review of "survey feedback" techniques, see Chapter 22 of M.B. Dunnette, ed., 1976, *Handbook of Industrial and Organizational Psychology,* Chicago: Rand McNally. Also, Schmuck and Runkel, 1972, *Handbook of Organization Development in Schools,* National Press, (or contact, Center for Educational Policy and Management, University of Oregon) provides a number of useful exercises in organizational development. Many intermediate and state education agencies, as well as Regional Educational Laboratories, have trained organization developers who can assist schools and districts in survey feedback and organizational development interventions.

DISTRICT LEVEL POLICIES AND PRACTICES Supporting Effecive School Management and Classroom Instruction

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Research on the management of effective school systems and the performance of effective school boards is not nearly so extensive as is the research on effective teaching and effective schools. Regardless of these facts, school boards and school superintendents must, and do, act. Indeed, the ability to act wisely in spite of limited knowledge and limited information may be the distinguishing mark of great superintendents and effective school boards. The purpose of this chapter is to provide the reader with some general guidelines which may increase the likelihood of wise action being taken in an area where ignorance is more pervasive than is knowledge—the area of policy making aimed at promoting effective teaching and effective schools.

A POINT OF VIEW

As Levine (1984) has shown, there are striking parallels between what is known about effective schools and effective teaching and what management theorists are coming to understand about the most effectively run American business enterprises (Drucker 1973; Grove 1984). This is not to say schools are businesses, or schools do or should have businesslike characteristics. Rather, these parallels suggest that modern businesses are becoming more school-like, and that the most effective businesses are those which have learned to manage their school-like qualities most effectively (Schlechty and Joslin 1984).

More specifically, over the past fifty years in American business the dominant task has shifted from the management of manual workers to the management of knowledge workers. According to Drucker (1973, 32), knowledge workers are persons who "put to work what they have learned in systematic education, that is, concepts, ideas, and theories rather than putting to work manual skill or muscle."

The interesting fact is what has recently emerged as the dominant task of American industry—the management of knowledge workers—has long been the task of public school administrators. Unfortunately, it only now is beginning to occur to educators and to corporate executives that the conditions required to make knowledge workers productive are fundamentally different from conditions required to make manual workers productive. Drucker summarizes these requirements well. His summary also iterates the basic message contained in the effective schools and effective teaching literature for school boards and school superintendents. Drucker writes:

> 1. "Management will therefore have to run at one and the same time an existing managerial organization and a new innovative organization" (p. 31).

2. Management "will have to learn to lead rather than manage and direct rather than control" (p. 30).
3. "Knowledge work cannot be productive unless the knowledge worker finds out who he is himself, what kind of work he is fitted for, and how he works best" (p. 33).
4. "There can be no divorce of planning from doing knowledge work. On the contrary, the knowledge worker must be able to plan himself" (p. 33).
5. It is not possible to "objectively determine one best way for any kind of work to be done. There may be one best way, but it is heavily conditioned by the individual and not entirely determined by the physical or even by the mental characteristics of the job. It is temperamental as well" (p. 33).
6. "Making knowledge work productive will bring about changes in job structure, careers, and organizations as drastic as those which resulted in the factory from the application of scientific management to manual work" (p. 33).

When the results of the effective schools and effective teaching literature are combined with the results of research on America's best run companies, one can develop some relatively clear images regarding the ways in which policy makers might best proceed to meet the requirements of excellence in those knowledge work organizations called schools. Thus, while the remainder of this paper focuses on the implications of the effective schools and effective teaching literature for local school boards and superintendents, much of the discussion is based on understandings and insights provided by the study of America's best run companies.

THE BASIC LESSON AND ITS IMPLICATIONS

In summary, the basic lesson of the effective schools literature is that effective schools are characterized—as Grove (1984, iiv) has characterized a well run business—by "energetic and committed people sitting down together, looking at problems, and figuring out ways to solve them." The critical questions superintendents and boards of education must ask themselves are "What does it take to gather a group of energetic and committed people?" and "What does it take to get them to sit down together, look at problems, and figure out ways to solve them?" The effective schools and effective teaching literature offers some elegantly simple (not to say simplistic) answers to these questions.

1. If a school is to be effective, there must be clear goals or a clear mission for the school, and all who participate in the life of the school must be brought to understand and be committed to these goals or this mission.
2. Attention is fastened on clear, observable, verifiable results which, if achieved, would indicate that goals are being successfully pursued or missions fulfilled.
3. People and the resources people bring to their jobs are viewed as the most important resources available to the organization. The job of leaders is to direct the energy of people in such a way that each individual can be maximally productive. Implicitly, at least, principals in effective schools seem to accept the maxim that the "performance rating of a manager cannot be higher than the one we would accord to his organization" (Grove 1984, 187).

4. Problems and their solutions are the driving force of the life of the organization. Individuals are rewarded for identifying problems and for proposing solutions, not for avoiding and suppressing problems and concealing mistakes.
5. School improvement is "viewed both as an ongoing process and as a collective responsibility shared equally among all teachers in the school" (Bossert, this volume) as well as with the principal.

The effective schools literature suggests, then, that superintendents and board members must be attentive to developing (1) policies which foster the development of clear goals in each school building, (2) policies which encourage faculties and building administrators to translate these goals into measurable results, (3) policies which encourage teachers and administrators to invest in each other and trust their own initiative and imagination as the most promising source of solutions to problems, (4) policies and programs which accept problems and conflict as a normal part of organizational life rather than a pathological condition to be avoided, and finally, (5) policies which foster a long-term developmental view without paralyzing the organization's ability to respond to the need for immediate action. The remainder of this paper will provide a discussion of some specific policy implications in each of the five areas outlined above.

DEVELOPING AN IMAGE

As a first step toward developing policy to foster the conditions suggested to be appropriate by the literature on effective schools and effective teaching, it is important for school boards and top-level administrators to examine carefully the image they hold of schools and the schooling enterprise. One of the greatest dangers of the effective teaching literature is its potential for being used to reinforce the existing tendency for schools to become more bureaucratic. It is but a short step from a research description of how effective teachers teach to a prescription of "all teachers must teach this way and only this way." Bureaucratic mandates and minimum standards may raise the floor and guarantee a higher level of mediocrity. However, bureaucracies are not designed to promote excellence. Bureaucracies are designed to assure that minimum standards are met. Organizations which promote excellence value inventiveness and deviation from the norm at least as much as they value the achievement of high standards and the rigorous pursuit of lofty goals.

Three key questions system-level policy makers must constantly ask and ask again are:

a. What is our school system about—what are its binding goals and commitments?
b. If we continue to do what we are now doing, what will our school system likely be about in 5 to 10 years?
c. What should our school system be about?

Answers to these questions are not easy to come by, but they are impossible to come by unless one is attuned to the notion of measurable results. For example, if one wanted to know what a school system is about, one way to begin to answer this question would be to examine the school system's budget. When additional resources become available, where are the funds allocated? (This author submits, only half facetiously, that boards of education which

evenly distribute budget cuts or budget increases across all programs and projects often do so because they do not know, cannot agree on, or will not acknowledge, what their school system is about.) Another way to determine what a school system is about is to measure the way time is allocated. To whom do principals most frequently talk and what do they talk about? What groups, constituencies, and items command the superintendent's attention? To what subjects or activities do teachers give their time in classrooms, in faculty meetings, and in the lounge? What items dominate the attention of the school board?

The way money is allocated and the way time is allocated are both results that are measurable. Furthermore, these are results providing a clear indication of the operational goals and priorities of the system. Thus one could, through a process of induction, gain a relatively clear image of what the goals and priorities of a school system are, by examining how resources such as money, time, and personnel are allocated.

It can be argued, of course, that such results are far removed from the real results of the school—that is, student achievement. Perhaps so, but the effective teaching literature suggests otherwise. One of the most effective ways of increasing student achievement in a particular area is to induce students to spend more time on tasks related to the area of concern. Similarly, it would make sense to find a principal who is an effective instructional leader spending more time in instructional activity than one who is not an effective instructional leader. This is common sense, but unfortunately, common sense is not common knowledge.

To gain a sense of what the school system might be about if the system continued to function over the next 5 to 10 years as it is now functioning, one needs to look at trends. For example, one could look at budgets over the past 5 to 10 years to determine changes that have occurred. Data could be developed to determine whether teachers were spending more or less time on any given activity than they did in the past.

Such an analysis could go far to help policy makers determine where they are and where they are likely to be headed. But, there is something much more critical to be determined. To give meaning to the measure of present results, policy makers must have a clear image of where they want to go, as well as a detailed knowledge of where they are and where they seem to be going.

Perhaps the most useful element of the effective schools and effective teaching literature is the focus it provides for serious discussions among policy makers regarding where they want the systems they manage to go. For example, the effective teaching and effective schools literature clearly indicates that schools and teachers spending more time on academic tasks increase the amount of academic learning that occurs. The easy logic would be to suggest the need, therefore, to lengthen the school day or lengthen the school year. Perhaps this is so, but there are other options. For example, one could imagine a scenario where the academic learning time could be increased by developing policies intended to reduce the number of interruptions in schools and classrooms. Other alternatives might include making the decision that academic programs would take precedence and priority over all other programs in the school system, and when choice points occur (for example, attending a history class or football practice during the last period of the day), giving the academic program precedence.

These options are suggested as points of illustration rather than as points of advocacy. What is being illustrated is a paramount responsibility, on the part of top-level decision makers in every school system, for careful consideration of what school is about and what the priorities should be. Admittedly, articulating a clear image is almost certain to generate value clashes and dis-

ment. Many school boards carefully attempt to avoid such open value clashes (Vidich and Bensman 1968).

It does take considerable courage for superintendents to foster such potentially tension-producing discussions. However, unless school boards and superintendents are willing to take such risks, there is little likelihood that the effective schools and effective teaching literature will have *any* significant implications for local boards and superintendents. If the effective schools literature, along with the literature on America's best run businesses, verifies anything, it verifies most clearly the old adage, "people who know where they're going are more likely to get there."

MANAGEMENT BY RESULTS

One of the happy outcomes of the effective schools literature is that the findings seem to coincide with what management theorists like Drucker suggest to be the case in other organizations. Simply put, organizations using measurable output as a means of directing individual and collective action are more effective than are organizations using other criteria for direction (such as the whims of administrators or the personal preferences of employees). One of the unhappy outcomes of the effective schools literature may be to encourage education policy makers to confuse results that are easily measurable (standardized test scores, for example) with measurable results. At the risk of seeming pedantic, it is suggested that if there is a single most important lesson for educators to learn from the studies of America's best run businesses (such as Peters and Waterman 1983; Grove 1984), it is that there is a difference between management results and the results of management. Furthermore, the results by which managers should manage are management results rather than the results of management.

Management results refer to events over which the manager (teachers as well as principals are included in the category of manager) has some direct control and the possibility of direct influence. For example, the effective teaching literature clearly indicates that teachers have considerable control over how time is controlled and managed in their classrooms, and that teachers vary considerably in the way they allocate and manage time. The allocation of time is a management result, and as such, it is a result for which the teacher as manager can reasonably be held accountable. Similarly, the effective schools literature indicates considerable variation in the extent to which principals are visible in the school, the extent to which they visit classrooms, and the frequency with which they hold job-oriented conversations with teachers. Increasing or decreasing the frequency of such occurrences is a matter generally under the control of principals. It is a management result, and as such, a result for which a principal can justifiably be held accountable.

The effective teaching and effective schools literature also suggests that when principals and teachers produce management results like those indicated above, the result of such management is likely to be improved test scores. However, neither teachers nor principals have direct control over test scores, and one of the first axioms of sound management theory is not to hold persons accountable for events over which they exercise little or no control.

The key, of course, is that school boards and school executives must have a clear notion of what they expect students, teachers, principals, and others to do; they must communicate these expectations clearly, check to see if these things are being done, provide corrective action and support where they are not being done, and then assess whether the doing of these things produces the end results that are intended. Frightening though it may be, school boards and top-level administrators are responsible for assuring that teachers et al. are ex-

pected to do the right things. Teachers and principals are *only* accountable for doing right the things they are expected to do. Thus, those who are accountable for test scores and other results of management (such as vandalism rates, truancy, and drop-outs) are those who specify what is expected of teachers and principals—that is, superintendents and school boards.

It is critical, however, for policy makers not to confuse *results with the way results are achieved*. Process should not be confused with product. For example, one principal might assure effective leadership by conducting departmental or grade level meetings. Another principal might assure such leadership by conducting inservice workshops for faculty personnel focused on adult leadership, and then delegating leadership responsibility to faculty members. Yet another principal might have an uncanny knack for identifying and recruiting personnel who have the requisite leadership skills. In all three instances, the management results could be essentially the same—the presence of strong and effective instructional leadership. The management result is what is important, and such results can be measured.

What is being suggested is that the effective teaching and effective schools literature should not be viewed as a cookbook or recipe. Rather, the effective teaching and effective schools literature provides a preliminary statement of some measurable management results which seem to be associated with student achievement on some very narrow measures. It is up to policy makers to determine what other results they wish to pursue. Once such decisions have been made, it should then be possible for researchers to provide assistance and guidance in determining what types of management results are most likely to produce the end results—the results of management—which policy makers desire. For example, it may require a very different approach to teaching to increase student problem-solving skills than is required to help students master the basic skills needed to decode the printed word. This is not to imply an either/or situation. What is proposed is that those who decide what management results they wish to pursue and those who have the power to enforce these decisions are the only persons who can and should be held responsible for the results of management. Boldly stated, it is time to acknowledge that boards of education and superintendents of schools are, in the long run, the primary accountability points for such results as test scores, just as corporate executives are the primary accountability points for long-term growth and profit. Holding teachers directly accountable for test scores is no more defensible than is holding first line supervisors at General Motors accountable for the profit of the corporation. What teachers can and should be held accountable for is engaging in those practices that most effectively produce the management results suggested by research and theory to be most closely associated with the outcomes desired of the schooling enterprise. The effective schools and effective teaching literature provides some strong hints about what some of these management results might be, but board members and superintendents who endorse these management results should do so in the full knowledge that they alone are accountable for the results of what they endorse.

MOTIVATION, EVALUATION AND DIRECTION

It sometimes escapes attention that the effective schools literature is primarily based on the study of atypical schools. The conditions found in these schools (such as norms of collegiality or clear goals) do not seem to exist in most or even a majority of America's public schools. In what some may consider to be an overstatement of the situation, Levine (1984) writes:

> Schools have for a very long time imposed upon teachers a set of working conditions that can only be described as demoralizing and debilitating.
>
> It is one of the paradoxes of teaching that an occupation that is based on nurturing, developmental knowledge, motivation, reinforcement, incentives, and rewards should itself be so deprived of those characteristics in the organizational setting in which it functions.

In summarizing the research on the conditions of the work place and its consequences, Levine goes on to write:

> Clearly, too many excellent teachers do leave; many who might become excellent teachers if they had the appropriate environment for improvement and professional growth also leave, feeling themselves to be failures.
>
> But that is not all that happens. Some do not leave but adjust their behavior to the conditions surrounding them. They "compromise" (Sizer 1984) or "make a deal" (Sykes 1983). The net effect is less teaching and less learning or sometimes none of either.
>
> Teachers who have "defected" identify conditions related to a feeling of inefficacy. Those conditions are why they leave; if turned around, they may become why they would stay. Rosenholtz cities the following findings:
>
> - Lack of opportunity for professional growth.
> - Inadequate preparation time.
> - Conflict with, or lack of approval from principals and other administrators.
> - Failure to deal effectively with student misbehavior.
>
> Rosenholtz points out that teacher turnover is highest in urban schools where these factors converge. Although low salaries are not overlooked, teachers leaving the field stress the importance of these other factors over the impact of low salary.
>
> An important implication of these findings is that changes in these conditions for teaching can result in greater teacher satisfaction and higher retention rates. Unfortunately the most important implication is *that student outcomes will be improved* when teacher efficacy is increased; and that, after all, is the bottom line. Much of the above discussion is predicated on the view that teachers' needs can be met by increasing the likelihood for professional accomplishment. It is also equally true that teachers acutely feel the disjuncture between professional expertise and any formal reward system.
>
> The psychic reward of professional accomplishment and the extrinsic rewards of money, status, and influence are all important.

Unfortunately, the nature of the research evidence could lead superintendents and school board members to assume that all or most of these matters are solely the responsibility of building principals and local school faculties. Indeed, naive interpretation of the literature on effective schools could

lead one to conclude that the question of centralization versus decentralization has at last been resolved. For some, the effective schools literature suggests every school building is a kingdom unto itself and effective kingdoms are those with strong kings. This is a mistaken interpretation of the literature.

Strong leadership at the building level is a critical determinant of an effective school. There is, however, no evidence suggesting the principal is or should be the only, or necessarily the best, source of strong leadership. Rather, the effective schools literature demonstrates that effective principals are those who provide *or cause others to provide* strong leadership.

The obligation of system-level policy makers, therefore, is to assure the presence of strong leadership in each school building. Fostering the emergence of such leadership through the assigning of principals, the training of principals, and the training of teacher leaders (department chairpersons, for example) is a central responsibility of school superintendents and their staffs. (Grove, the CEO of Intel, regularly teaches a class for beginning managers of his corporation.) It is also a responsibility which should not be delegated to a building-level unit. Thus, one of the most critical decisions district-level policy makers must make concerns the development of clear and explicit statements of what is meant by effective leadership. Equally important, they must decide what kinds of indicators are to be used to show that effective leadership is present. For example, some boards of education implicitly define effective leaders as those having little or no trouble with staff or parents. The indicators of effectiveness are frequently nothing more than the rate and frequency of staff and parental complaints. Though one might argue with this definition of effective leadership, the point is most definitions of effectiveness can and do have measurable indicators.

In addition to the identification, placement, and development of building-level leadership, there are other functions which cannot or should not be decentralized. Chief among these are (a) the development and articulation of the guiding goals of the school system, and (b) the development and specifications of indicators to be used in assessing the effectiveness with which goals are pursued. Such processes should be diffuse through out the system, all should participate, but it is a central responsibility to assure that the processes go on.

It is important to understand at this point that if equity and excellence are both ends worthy of pursuit, then determination of what goals should be pursued, and what standards of performance are acceptable in this pursuit of goals, cannot be left up to individual building units. Ironically, it is the failure to understand this basic fact which has made the effective schools literature possible in the first place. Indeed, it was the wide variance in the performance of students in the same school system on measures of achievement of basic skills which led to the notion of outlier schools and thus to the notion of "effective schools." In areas such as basic skills, the attainment of which is so critical to future life, individual faculties and individual principals should not be permitted to choose whether they will pursue such goals or what standards will be used to determine the effectiveness with which these goals are achieved. Such decisions must be made collectively, with significant contributions from all concerned constituencies, but the ultimate authority for making such decisions lies with the community and those who represent the community.

Given this seemingly strong argument for centralization, the argument will now be reversed. Just as there are some things that cannot or should not be decentralized, there are some things that cannot or should not be centralized. Chief among these are (a) identifying and clarifying those conditions and factors which impede the effectiveness with which the building unit and/or classroom teachers pursue the goals they are assigned, (b) the development

and implementation of plans and programs intended to address the problems that may have been identified, (c) decisions regarding what resources and personnel are needed to implement plans, and (d) decisions regarding how resources should be assigned.

In summary, while it is the function of the central administration to determine what goals are to be pursued and to establish indicators for measuring the effectiveness of goal pursuits, it is the function of those directly responsible for implementing programs to design and manage such programs, in ways that their understanding of the local situation indicates to be most effective.

There are, of course, many gray areas regarding what should be centralized and what should be decentralized. For example, some argue that personnel assignment, including who should be employed and under what conditions, should be strictly a building-level concern. Some argue that the building-level units should have considerable fiscal autonomy. However, such decisions can only be made on a case by case basis. For example, if one of the goals of a school system is to pursue the concept of a unitary school district, to the point that both teachers and administrators would place their loyalty to the total school system above their loyalty to a building-level constituency, then centralized control of personnel assignment and transfers would make considerable sense. On the other hand, if each building's student constituency is held to be so unique that only a cohesive faculty with intimate knowledge of that constituency's peculiarities could serve it effectively, then it might make sense to give the building-level unit considerable autonomy in personnel assignment and placement.

In summary, the effective schools literature does not seem to argue for decentralization any more than it argues for centralization. It does point out that issues related to centralization are more than political issues. What should and should not be centralized is a pedagogical issue as well. What should be centralized, and to what degree, is a critical decision, and one that must be made *centrally*. Furthermore, once made, such a decision may need to be reexamined if circumstances change, new problems emerge, and different goals gain emphasis. Finally, such decisions should always be made against a single criterion: What will be the impact on the capacity of the school to develop and maintain the human resources it now has, and to recruit and attract the kind of human potential likely to be needed in the future?

PROBLEMS AND GROWTH

One of the most interesting lessons taught by both the effective schools literature and the literature on America's best run companies is that problem identification and problem solving cannot be separated. As Drucker points out, there can be no divorce of planning from doing. Tacitly, wise teachers and administrators long have understood the master curriculum guide served more to satisfy the needs of the central office and regional accrediting offices than it served to direct activity in the classroom.

Furthermore, it is well and good to propose that teachers and building-level administrators actively involve themselves in problem identification and problem solving, but such activity can only become productive in an environment in which it is all right to have a problem in the first place. For example, many teachers and building principals rightly fear the growing tendency to publish test scores in local newspapers precisely because they perceive such activity as a blame-placing strategy rather than a problem identification strategy. School board members and superintendents need to understand that schools with low test scores do have problems, but that it is in no way clear what those problems are or how they might be best resolved. Furthermore, it does no

more good to tell a building principal and his/her faculty that they will be held accountable for improving test scores than it does to tell the weakest hitter on a baseball team to quit striking out. What is needed are help, encouragement, support, and incentives, rather than blame.

Outside of a specific context it is difficult to suggest specific policies which school boards might institute to foster creative problem identification and creative problem solving, for these are more matters of tone and texture than policy. Yet, such matters cannot be or should not be too easily dismissed. The creative capacities of teachers and building administrators cannot be liberated in an atmosphere of fear and threat. If nurturance and support are expected at the bottom, then an attitude of nurturance and support must start at the top. The creation of such attitudes is a result of management, and as such, it is a result for which superintendents and school boards are most accountable.

Local policy makers should recognize that change and improvement are continuous non-linear processes. Sometimes specific change efforts will produce, in the short run, what appear to be undesirable outcomes. For example, except in unusual cases, the short-term consequences of moving a faculty comfortable with a bureaucratic structure to the more collegial and non-bureaucratic forms of goverance—suggested to be appropriate by the effective schools literature—are likely to be a temporary decrease in faculty morale, an increase in faculty turnover, and an increase of complaints that the administration is not doing its job. What policy makers must keep in mind is that the norms and values which give high priority to disciplined problem solving and continuous improvement are substantially different from the norms appropriate to routinization, standardization, and the maintenance and defense of the status quo. In a hostile environment, problems are perceived as threats to the social order. In beleaguered and threatened organizations, problems are to be coped with, dealt with, hidden or submerged as quickly as possible, in order for the real business of the organization to continue—the business of doing business as usual. In effective organizations, including effective schools, problem seeking and problem solving are the life-blood of the organization. Problems are accepted as normal events, not signs of organizational pathology. Failure to solve problems in the short run is tolerated, just as success in solving problems is, in the long run, rewarded.

In summary, if boards of education and administrators are serious about encouraging effective schools, they must be willing to do some things uncharacteristic of boards of education and managers of public bureaucracies. Most of all, they must be willing to tolerate problem causing as well as problem solving, and they must recognize that change and improvement cause problems as well as resolve problems. Thus, policy makers and other administrators must develop a long-term view and the patience such a view suggests. At the same time, policy makers and top administrators must choose and emphasize key results conveying impatience and an action orientation.

CONTINUITY OF DEVELOPMENT

Promoting and developing the conditions described in the preceding sections of this paper are critical if the intent is to promote effective teaching and effective schools. However, clear goals, measurable results, a commitment to the development of human resources, and a problem-solving orientation are likely to have little significant impact if school boards and superintendents fail to appreciate the nature of school improvement as a long-term developmental process rather than a short-term result. Effective schools are not simply good schools. Effective schools are schools in which there is a strong commitment to getting better and being more effective, and this commitment is shared by

almost all who participate in the life of the school. Somehow, the persons who function in these schools have, in Drucker's terms, "learned to run at one and the same time an existing managerial organization and a new innovative organization." To achieve this end, they have learned to think in terms of effectiveness rather than efficiency and in terms of the long run as well as the short run.

It is an unfortunate fact of public life that political realities tend to support efficiency (productivity at the lowest cost in the shortest period of time), rather than effectiveness (increasing the capacity of the organization to meet future demands as well as present needs), as a prime value. Furthermore, there is a strong drive for short-term, quick-fix answers rather than long-term fundamental solutions.

There are, of course, many reasons for this condition. For example, school systems experiencing high turnover in the superintendent's office have a difficult time maintaining continuity of direction. Faculty turnover and school board elections can have similar effects. Clearly, however, one of the greatest barriers to the establishment of the norm of continuous improvement (Little 1982, 325-340) is the uncertainty of continued funding and continued support for projects once started. Indeed, based on research currently underway (Schlechty, 1984), it is apparent that one of the greatest sources of resistance to change in schools—and one of the greatest barriers to the development of commitment to the change process—is the generalized view among teachers and building-level administrators that those who manage school systems and the boards setting policies for schools are unable or unwilling to sustain the momentum required to assure continuous improvement.

Many of the factors creating the conditions which discourage continuous improvement are, in the short run at least, beyond the control of local boards and local superintendents. The introduction of a newly-elected board member or the employment of a new superintendent will and should bring about some changes in direction. The tendency for schools to be budgeted on an annual basis and the lack of assured dollars (especially in the areas of research, staff development, and program development) are unavoidable realities. In spite of these realities, there are actions which can be taken by school boards and superintendents to offset some of the negative consequences these conditions produce. Some ideas along this line follow:

1. Existing school boards working with the present superintendent, the existing staff, and perhaps outside consultants could develop, in advance, a systematic orientation program for a new superintendent and perhaps for new board members. The development of such an activity should probably not occur at the time new board members are being installed or at the time a new superintendent is being employed. Rather, such an activity should be undertaken in a period of relative stability on the board and at a time when the tenure of the present superintendent is relatively secure. Planning for the identification and/or development of one's own replacement is a critical activity. Furthermore, such planning, and the thought it requires, should cause present board members and superintendents to take seriously the charge of identifying and articulating the image they hold of their school system.
2. Local school boards and superintendents should seriously consider the prospect of establishing an endowment fund targeted specifically for the support of school improvement projects. Such a fund, once established, could be used to provide individual teachers and school

faculties with small grants to support local school initiatives. The same funds might be used to reward faculties for inventions they produce, and to support activities aimed at sharing the inventions produced in one school with teachers and administrators in other schools. Perhaps the most important addition an endowment would make would be to enable the school system, if only in a small way, to foster and encourage long-term development and to supplement these long-term commitments with whatever short-term funding might be available.

3. School boards could and should establish policies, procedures, and programs making it possible for local school faculties to induct new teachers into the culture of the school. Faculty stability appears to be closely associated with effective schools (Purkey and Smith 1983). Unfortunately, given the demographics of the teacher work force, teacher turnover will most probably increase dramatically over the next decade. (Schlechty and Vance 1983; Darling-Hammond 1984.) Careful and systematic induction into the existing culture of the school is one of the most promising ways to assure the continuity of experience which will be required when demographic forces are fostering discontinuity of experience.

The suggestions provided above are clearly not drawn from the research on effective schools. Furthermore, these suggestions may or may not be relevant in the context of an individual school. The critical point is that those who run schools and those who make policies for schools, if they want to encourage school effectiveness, must carefully weigh the impact of every decision they make on the ability of local schools to maintain continuity of experience. This continuity, coupled with the emergence of a school culture which honors, rewards, and inspires outstanding performance, is the critical component of effective schools.

A FINAL COMMENT

Persons who read this chapter are likely to be persons who run things. Experiences with persons who run things suggest that when they seek advice they want precision. However, those who address themselves to persons who run things would be ill advised to be too precise and too certain, for those who run things also know it is never really that way.

This chapter has attempted to be *generally* precise, and to indicate some issues which policy makers must address if the power of the emerging literature on effective teaching and effective schools is to be effectively utilized in public schools. However, it would be less than candid not to point out that there is an even more fundamental problem. That is, effective schools require a long-term commitment to systematic and disciplined innovation, change and development. Present patterns of school finance, especially the tendency to build school budgets on an annual basis, make long-term planning difficult. This difficulty is increased precisely because those aspects of the budget most likely to be given low priority are the parts dealing with change and development. Effective schools cannot be encouraged on a system-wide basis until school systems find some way to generate "developmental capital" for investment over the long term. Furthermore, such capital investments must be predicated on the assumption of the possible failure of any individual project, as opposed to the more conservative guarantees of success often required by public fiscal policy. If anything can be learned from studies of America's best run corpora-

tions, it is that those corporations experiencing the greatest success have the highest tolerance for little failures. Accountability does not require success on every try. Accountability requires that facts be available which make it possible to understand why things did not work as planned. Only by attending to such facts can we avoid repeating failures. It is of even greater importance that the availability of such facts makes it possible to replicate successes, and thereby expand the effectiveness of all schools.

REFERENCE NOTES

1. **Effective Schools and Effective Teaching.** In addition to the other chapters in this sourcebook, the following articles and books are particularly helpful: L. Darling-Hammond, July 1984, *Beyond The Commission Reports: The Coming Crisis In Teaching,* Rand Corporation, R-3177-RC; J.W. Little, 1982, The Effective Principal, *American Education 18* (7), 38-42; S. C. Purkey, and M. S. Smith, 1983, Effective Schools: A Review, *The Elementary School Journal 83* (4), 427-452; P.C. Schlechty, Report in preparation for NIE grant number NIE-G-83-0064; P.C. Schlechty and A.W. Joslin, (forthcoming) Images of Schools, *Teachers College Record;* P.C. Schlechty, and V.S. Vance, 1983, Recruitment, Selection, Retention: The Shape of the Teaching Force, *The Elementary School Journal 83,* 469-487.
2. **Effective Management.** The literature on well-run companies has much to offer the thoughtful superintendent and board member. Some key readings include: P. Drucker, 1974, *Management: Tasks, Practices, Responsibilities,* New York: Harper & Row; A. Grove, 1983, *High Output Management,* Westminster, MD: Random House; M. Levine, April 1984, *Excellence In Education: Some Lessons From America's Best-Run Companies and Schools,* report prepared for the Committee for Economic Development; T.J. Peters, and R.H. Waterman, Jr., 1982, *In Search of Excellence,* New York: Harper & Row.

STATE LEVEL POLICIES AND PRACTICES
Supporting Effective School Management And Classroom Instruction

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The facts are clear. Since 1975, 37 states have developed school or district planning programs; 47 states have established new curriculum development or technical assistance initiatives; 15 have created state-level effective schools programs; 44 have state-run staff development programs for teachers and 31 have such programs for administrators; 29 states have developed new incentive programs for teachers; 7 require new kinds of field experiences for teachers; and 16 have begun requiring supervised internships for beginning teachers. Many of these programs are based specifically on the effective teaching and schools research (Odden and Dougherty 1982).

Yet in 1983, national reports on education virtually ignored these programs, emphasizing instead the shortcomings of public schools, new mandates, and standards and requirements.

The reports placed education back on state, local and federal policy agendas. But their exaggerated rhetoric and their focus on the hardware of education reform caused them to overlook implementation complexities and the vagaries of the school improvement process—the software of education reform. Many academics and educational leaders, although pleased to see education popular once again among political leaders, and delighted at increased funding in many states, nevertheless decried the admonitory tone of the reports and lamented political leaders' lack of understanding of the educational change process.

But educators need to change this dour perspective. How politicians get issues on agendas is different from how programs are designed and implemented, and few recommendations for reform specify how reform is to be realized. Seldom, moreover, does history provide the opportunities for progress in education that exist today. Education is one of the top concerns of governors and corporate officers who feel they have a major stake in the public school system and have pledged their leadership to improve it (Task Force on Education for Economic Growth 1983). Legislators see educational improvement as a priority that deserves increased funding. The public, too, feels that the quality of public schools must be improved dramatically, even if improvement means higher taxes. More than 250 state education reform task forces were created in the past year, and by mid-1984 many states (Arkansas, California, Florida, Illinois, South Carolina, Tennessee, Texas, and Utah, for example) had enacted major education reforms or begun new compensation programs for teachers. Six of these states raised sales taxes to fund bold, new, and expensive initiatives. School improvement initiatives also were expanded and strengthened (Odden 1984).

Also, educators have relatively wide and deep research on which to base strategies to improve schools. Knowledge of the related topics of effective

teaching, effective principalling, effective schools, change in schools and classrooms, and program implementation is expanding. There are even research results on the implementation and impact of state and local school improvement programs.

In short, political leaders firmly support efforts to improve the schools, educators know how to do so, and the public is willing to spend extra money on improvement if necessary. Needed now is education leadership that can capitalize on these opportunities.

Following is a discussion of the roles states can play in creating and sustaining effective schools. Section One summarizes the research; Section Two outlines implications for state policy in seven different areas.

RESEARCH ON SCHOOL EFFECTIVENESS

This section summarizes the research on effective teaching, effective principals, and the characteristics of effective schools. It also summarizes the research on educational change (specifically for the purpose of school improvement) and state and federal program implementation. These last two topics are usually absent from summaries of school effectiveness research, but research in these areas provides crucial information on how schools move toward effectiveness.

Effective Teaching

Researchers agree that teacher attitudes and expectations affect student performance. When their attitudes are positive—when teachers believe students can learn—classroom strategies are more varied, more homework is assigned and corrected, and students perform better. The students of teachers who approach instruction with a businesslike and task orientation achieve at higher levels. Learning is maximized when teachers view academic instruction as basic to their role as teachers, expect students to master the content of the curriculum, and allocate a maximum amount of time to instruction.

Classroom management also affects student performance. The most effective teachers maximize the time available for instruction. They are well prepared, maintain a smooth pace during lessons and do not get confused about what to do next. Transitions between activities are brief and smooth, little time is lost getting organized, and seating configurations, traffic patterns and material storage are designed to complement instruction. Students are taught the rules governing classroom conduct, use of materials, and classroom procedures at the beginning of the school year.

Teacher pedagogical practices also are important. Active teaching improves student performance, especially when introducing new content, but also when presenting sequentially ordered content. Active teachers often present information through lecture and demonstration, provide feedback through sequential questions, and prepare students for seatwork, during which they will experience success as high as 80 to 90 percent. Effective teachers convey academic content personally to students rather than just using curriculum materials. They carefully structure the presentation of content, use advance organizers, set lessons in context, summarize at key points and review main ideas. They also provide numerous opportunities for practice and feedback, through classroom recitation, seatwork and homework, and sequence questions from lower to higher levels. Furthermore, effective teachers create a supportive, friendly climate, praise students for specific achievements, turn incorrect student responses into opportunities for instruction, and focus attention on genuine achievement and mastery. As a result, they maximize "academic learning time," the amount of time allocated for in-

struction during which a student is engaged at high rates of success—the greater the academic learning time, the greater the achievement (Denham and Lieberman 1980).

Effective Principalling

Studies on effective principals show that the work of principals consists primarily of brief, fragmented, and varied interactions with people. Although usually taught otherwise in training programs, administrators spend 80 percent of their work day in brief encounters with staff, faculty, students or parents. Desk work takes up only 12 percent of their time, and phone calls 8 percent (Manassee 1983).

These work patterns are characteristic of both more and less effective principals. But in the midst of confusion and competing demands, effective principals use their status and power to set strategic goals for their schools, then direct the entire school program towards those goals. Effective principals function as instructional leaders. They enhance effective teaching practices, for example, by assuring more time for instruction and fewer classroom intrusions, assigning students to groups and classrooms to obtain a pupil mix appropriate for high learning, and developing curriculum coordinated and articulated across grades and programs. Effective principals create a school climate that supports high expectations for learning, collegial relationships among adminstrators and faculty, and commitment to continuous improvement. They know the effective teaching literature and expect teachers to know it. They help teachers use effective teaching strategies in their classrooms and sanction and reward teachers' efforts at improvement.

Effective Schools

In the 1970s several researchers began to report results of studies comparing more effective schools to less effective ones. According to this research, effective schools have these characteristics (Edmonds 1979; 1982):

- strong instructional leadership by the principal;
- an academic focus (a coordinated curriculum focused on academic goals; agreement that reaching those goals has priority);
- high teacher expectations that all students can master the curriculum;
- a system for assessing student performance that is tied to the instructional program and gives teachers information about student progress;
- a climate conducive to learning (safe, orderly; discipline is fairly and consistently enforced).

Although some researchers questioned the relevance of these findings for secondary schools, several studies on effective secondary schools have produced complementary results. The more than 300 middle, junior high and high schools recognized as exemplary by the then Secretary of Education, Terrel Bell, also show remarkable consistency with the above findings.

In the most recent synthesis of effective schools research, Purkey and Smith (1983) expand on the characteristics noted by Edmonds to distinguish between organizational and process variables. Fullan (1983), linking these findings with research on educational change, concludes that effective schools have 12 major characteristics:

Organizational

1. Strong instructional leadership, usually but not always from the principal;
2. Support from the district office;
3. Emphasis on curriculum and instruction;
4. Clear goals and high expectations;

5. A system to monitor student performance;
6. Ongoing staff development, including effective teaching strategies;
7. The involvement and support of parents;
8. An orderly and secure environment;

Process

9. A feel for the change and school improvement process on the part of school leaders;
10. A value system that directs the school towards its strategic goals;
11. Intense interaction and communication among all people in the school;
12. Collaborative planning and implementation of school improvement efforts.

Educational Change

Research on educational change concludes that school improvement is a process, not an event. It is a process in which individuals alter their ways of thinking and teaching; it is a process of developing new skills and finding them meaningful and satisfying (Fullan, July 1983).

Change affects the schools as organizations, as well as individuals within schools (Crandall et al. 1983; Louis and Rosenblum 1981). Change can be planned and managed by school and district leaders. In synthesizing a number of studies, Fullan (1983) identifies seven elements of the change process:

1. School improvement takes place over two or three years.
2. The initial stages always produce anxiety and uncertainty (see Hall and Loucks (1982) on stages of concern in the change process).
3. Ongoing assistance and psychological support are crucial to help people cope with anxiety; the assistance must focus on the precise nature of the concern.
4. Change involves learning new skills through practice, feedback, and coaching; change is incremental and developmental.
5. Breakthroughs occur when people understand why a new way works better.
6. Organizational conditions within the school (peer norms and administrative leadership) and outside it (central office support and external facilitators) make change more or less likely.
7. Successful change requires pressure—but pressure through interaction.

Teachers, principals, central office staff and external facilitators usually play different roles in successful school improvement. Teacher commitment, which is critical, comes from mastering new teaching strategies; mastery comes with practice, feedback, and coaching. Teacher commitment does not necessarily come from involvement in determining school improvement strategy. Indeed, school improvement is more often successful when administrators exert strong and continuous pressure on teachers to adopt new techniques (Huberman 1983). Although this pressure lowers teacher commitment initially, commitment grows if long-term assistance is provided to help teachers master new practices.

Cox (1983) outlines the roles that principals, central offices and external facilitators (consultants or state education agency staff) play in successful school improvement. Generally, principals make sure all staff know that school improvement is a top school priority. They make resources available, give teachers time to practice the techniques in their classrooms, give teachers access to people who can coach them, and allow two to three years for improvement. If principals assist teachers in implementation, they affect teacher outcomes—mastery of practice. If principals focus on school-wide direction

and support, they affect school-level outcomes—school-wide change and institutionalization. Central office staff, who usually know the nature of the school, the needs of its students, and the content of the change, are most effective in organizing or conducting training workshops and helping teachers with classroom implementation. Their activities primarily affect individual teachers. Facilitators from outside the district are usually most helpful to the district and school in preparing a congenial environment for change—insuring the availability of facilities and resources. Where principals, central office staff, and external facilitators all play key roles, more change takes place and is more successful.

Successful improvement requires that someone provide assistance, mainly to teachers, focused on the *content* of change—helping teachers implement new practices. Improvement also requires that someone provide assistance focused on the *context* of change—obtaining approvals, resources, and facilities (Cox 1983). Anyone can play these roles, but the research suggests that the divisions of labor described above tend to dominate.

In short, many mysteries of educational change have been solved. Moreover, most successful improvement is engineered, that is, it does not just happen, but is the result of leadership and planned action.

State and Federal Program Implementation

Research findings on program implementation complement findings on educational change. Successful implementation takes time, is more effective if it is integrated rather than maintained as a separate program, and must include ongoing technical assistance—coaching. Federal and state compensatory, bilingual, vocational and special education programs have increased financial resources, expanded educational services, and created state and district capacity to develop and implement programs.

But over time, rules and regulations (compliance and monitoring activities) tend to increase, at the expense of technical assistance, the key element in the change process. This tendency is best exemplified in the evolution of the largest of these programs, the Elementary and Secondary Education Act of 1965 (now the Education Consolidation and Improvement Act of 1982). The original bill included Title I, which provided substantial new funding for services to low income, educationally disadvantaged children, as well as other titles that provided money for the development of pilot programs, practical research, and technical assistance. The intent was to allow local districts flexibility in designing programs to fit their needs and to help them implement these programs (Elmore and McLaughlin 1982). But interest in assistance gradually eroded. Federal practice fostered state practices that also emphasized compliance and coercion, and many states began to see regulation as the best vehicle for education reform (Murphy 1982).

In the late 1970s, practices began to change. Research on federal school-improvement program implementation began to show that providing technical assistance to schools and districts would improve education. Drawing on this work and the school effectiveness research, states began a wide range of school-improvement technical assistance programs (McLaughlin 1983). Studies give preliminary indications that state education agencies are shifting from an emphasis on fiscal control to one on program quality (Burnes, Fuhrman, Odden, and Palaich 1983) and developing school improvement programs that work.

In short, states, districts and schools know what constitutes effective teaching. They can describe the behavior of effective principals and outline the characteristics of effective schools. They know the steps of the educational change process. Furthermore, they know how to integrate all this information into effective state-supported school improvement initiatives.

The Symbolic Elements of School Improvement

The technical and educational components of school improvement are indeed well known. But successful school improvement is not just a technical activity. Improvement must be guided by a skilled leader who has a feel for the change process, as well as technical knowledge. Such a leader must fuse the technology of school effectiveness with a school culture that sustains hard work, builds collegial interaction, and maintains trust and respect. Good teaching, and learning, require commitment and engagement. To develop commitment and engagement, effective school leaders manipulate symbols to control and direct behavior.

Good principals manage symbols effectively, centralizing the school on key values and decentralizing all else. They outline their vision of the school to everyone in the school, manage the goal-setting activities to implement the vision, and generate commitment to these goals. Such principals announce expectations for students and teachers, and model norms. Furthermore, they use rituals, symbols, and slogans to hold things together. Capitalizing on their fragmented work patterns, these principals spend lots of time one-on-one reminding people of their vision. They monitor progress towards goals, and teach people to interpret efforts and progress in common language. Good principals also reward teachers who improve, and protect teachers who attempt innovation.

This style of leadership is similar to effective leadership in the private sector (Kotter 1982). Excellent companies are headed by "symbolic" leaders whose selective attention to goals and behaviors signals what is valuable and important. Symbolic managers stimulate people to meet an organization's goals by interacting, testing, staying in touch, changing direction, learning, adapting, and modifying their activities (Peters and Waterman 1982). These continuing activities induce clarity, consensus, and commitment to the basic purpose of the organization (Vaill 1984).

Essential to symbolic leadership is a compelling vision. The vision is the substance of what is communicated through symbolic actions. The symbolic actions, in turn, help build the culture which bonds students, teachers, and others in the work of that school (Sergiovanni 1984). Symbolic leaders articulate school purpose and mission; socialize members into the school culture; tell stories, myths, and legends to maintain and reinforce traditions; explain the "way things happen here"; and reward people for fitting into the culture. The culture identifies what is of worth in a school and governs how people should feel and behave. Succesful schools have strong cultures that steer people in a common direction. Strong cultures are also deliberate—they are nurtured and built by school leaders. They are what tightly couples effective schools.

As the next section indicates, symbolic leadership is also important in state efforts using knowledge of the research on school effectiveness to improve education.

IMPLICATIONS FOR STATE POLICY

States cannot mandate effective schools: the essence of an effective school is a strong culture, which derives from a strategic independence. Yet, states can help create and sustain effective schools in at least seven ways: (1) providing symbolic leadership to raise the status of education; (2) articulating clear state educational goals; (3) building awareness of the school effectiveness research; (4) developing system incentives that recognize and reward school effectiveness; (5) providing technical assistance to schools; (6) altering training and certification requirements; and (7) strengthening state data gathering.

Symbolic Leadership

Symbolic leadership at the state level places and keeps education on the policy agenda. Governor Jim Hunt did just that in North Carolina, for example, and as chairman of the National Task Force on Education for Economic Growth he asked every governor to form a task force to draft an education reform plan.

Indeed, a primary result of the many education reports has been to produce symbols of consensus about what to improve in education. The education system responds quickly to symbolic consensus. Over thirty states have raised high school graduation requirements, many are tightening standards, and nearly all are strengthening the curriculum. While next steps will vary across states, districts, and schools, the reports and state political leaders have refocused attention on education, just as attention was waning.

Symbolic leadership also helps raise the status of education. Governors and business leaders view improved public education as essential to revitalizing the economy and sustaining economic growth. Because the status of the people making these claims and the claims themselves help give education political prominence.

One way state leaders could sustain the momentum of support for education would be to use new metaphors in describing education and the work of the people in education. Schlechty (forthcoming) suggests viewing schools as "knowledge work organizations," teachers as "managers of knowledge workers," and principals as "managers of knowledge work managers." Berliner (1983) suggests viewing teaching as a set of executive functions: planning, communicating goals, regulating activities in the workplace, educating new members of the work group, and supervising, motivating, and evaluating other people. Education as the central activity in the information society and education as critical to the development of human capital are other metaphors that have meaning and status in our country. ("Taking care of children," unfortunately, does not.) By drawing on symbols the country values and respects, state leaders could help solidify the new stature of education.

Talking honestly but positively about education is another key symbolic activity for state leaders. Nearly all recent national reports recognize the need to reward excellence, for example. The language is upbeat and the intent is to recognize performance and achievement.

State leaders also can establish mechanisms for celebrating excellence in education: annual award dinners for outstanding teachers, recognition days for exemplary schools, governors' awards for education improvement, legislative scholar awards, and travel grants for outstanding teachers and principals are a few examples. Such programs and ceremonies keep the symbols of educational excellence in public view.

Since business interest in education has revived, state leaders could create ways to strengthen and publicize the bridges between education and business. In North Carolina, for example, the business community rewards outstanding educators, and the education community recognizes businesses that make contributions to education. In other states, businesses have funded state education foundations that recognize outstanding teachers or provide mini-grants for new programs.

State symbolic leadership may be as important for school effectiveness overall as symbolic leadership of principals is for excellence in individual schools. There is a force behind state symbolic leadership that puts education high on the policy agenda, raises its stature, and celebrates its contributions.

Articulating Goals

Generally, states have not clearly articulated the academic goals of educa-

tion. Statements of mission are often diffuse, and Goodlad (1983) found that academic goals are not primary in most states. This lack of clarity does not help districts or schools focus their energies.

The time may be ripe for states to set clear academic goals and stipulate that attaining those goals is the primary purpose of the education system. A statement of academic goals is one of the hallmarks of effective schools, and the national reports generally concur that academic goals ought to be reemphasized.

Awareness of Research

There is a lag between the emergence of new research results, their dissemination, and their use in new teaching strategies. Even when research results become known within education circles, they may not be known by the public or the press. Among the ways in which states could develop and disseminate information on school effectiveness to educators, the press, and the public are the following:

- Writing newsletters, holding seminars and sponsoring conferences for teachers, administrators, and staff;
- Developing state diffusion networks similar to the national diffusion network to encourage people to share knowledge across district boundaries;
- Holding conferences for the press and for groups of education and political leaders;
- Working with the media—explaining the school effectiveness research and arranging tours of exemplary schools or outstanding districts (Since education writers change jobs frequently, programs need to be repeated often).

System Incentives

Effective principals reward teachers and students for meeting key goals. The culture of effective schools positively reinforces those who embody its values in formal and informal ways, with monetary and nonmonetary rewards. Yet state and local public education systems often have no "system incentives," or formal mechanisms to recognize and reward outstanding performance of teachers, administrators, schools or students. At very low cost, states could give districts and schools incentives to meet key state goals:

Planning grants. One way principals produce consensus on school goals is through the planning process. Yet, few districts and schools have planning funds. States could award grants for planning, such as the school improvement planning grants in California, and Pennsylvania's grants for development of multi-year improvement plans.

Productivity bonuses for districts or schools that meet improvement or productivity goals. Houston, Texas and Columbia, South Carolina awarded such bonuses for years. Florida and South Carolina established merit schools and productivity grants in 1984, and awards for "merit schools" were proposed in California.

Competitive grants to administrators and teachers, like the old federal Title IV-C, for the development of innovative programs and materials. Arkansas, California and South Carolina included such grants in their recent reforms; the West Virginia state education foundation uses its resources for such grants.

Pay-for-performance systems for compensating teachers or annual bonuses for outstanding teachers. California, Florida, Illinois, South Carolina, and Tennessee are some states that now use these mechanisms. Indeed, new programs to pay and recognize teachers draw the bulk of new state education reform dollars (Odden 1984).

School-site budgeting. Research shows that improvement occurs school by school, so increasing the scope of school-site budgeting may be in order. The strategic independence needed by effective schools includes resource independence as well. Principals need control over resources to manage them effectively.

Choice within the public school system, within districts, and within schools. Effective schools have distinctive cultures; students and teachers who do not fit the culture are uncomfortable in it. Giving parents and students more choices regarding public schools to attend could not only strengthen the culture of each school but also improve public satisfaction.

Technical Assistance Programs

Research on school effectiveness, especially the research on program implementation, suggests strongly that a shift in strategy from regulation to technical assistance is needed to improve local program quality.

Connecticut, South Carolina, Ohio, and others already have state-run *effective schools programs* in which schools participate voluntarily. State education agency staff help schools assess the degree to which they have the characteristics of effective schools, design programs to develop those characteristics, and implement the programs.

State *school improvement programs* provide more generalized technical assistance. Colorado has created "clusters" of schools. Each cluster works on a different component of school improvement—school climate, effective teaching, effective school characteristics—and each is assisted by state education agency staff. Pennsylvania requires all schools to undertake periodic school improvement planning and provides assistance through consortia of local experts, state agency staff, and education professors. Maryland's program includes teacher training in one of four instructional models. California provides cash grants ($100 per student) to schools developing school improvement programs.

Missouri helps districts to align academic goals, instructional materials, and testing through an instructional management program. Education agency staff in New York used to help design program improvements for schools with concentrations of students scoring below state standards. Both South Carolina and Arkansas have empowered the state to intervene in districts with students consistently scoring below minimum standards on state tests.

Training and Certification

The most obvious use of the research on effective teachers and principals is to incorporate it into preservice and inservice training. It seems to be creeping into school of education courses more slowly than into new, state-run inservice training programs. The Arkansas "Program for Effective Teaching," now in its fifth year, draws on mastery learning, Madeline Hunter's program, and effective teaching research. It includes a 25-day cycle of presentation, classroom practice, observation and feedback. Nearly 66 percent of all teachers, 75 percent of the principals, and more than 50 percent of the professors in teacher training institutions have completed the program. So has the chief

state school officer. Teachers claim it has improved their instructional effectiveness and principals assert they are more skilled at classroom observation. Because institutions of higher education have participated, people feel teacher training has also improved; at least professors, student teachers, and supervising teachers now share a common perspective. Beginning this year, training in classroom management has been added to the program, drawing directly on research.

California, Maryland, Minnesota, New Jersey, and South Carolina also have developed state inservice teacher training programs. New York is distributing $20 per pupil to districts to organize these programs; services in the other states are conducted by the staff of state or regional education agencies.

Arkansas, Florida, South Carolina, and North Carolina have years of experience using school effectiveness research in training programs for administrators and academies for principals. As the research has become more widely known, programs have focused on instructional leadership. South Carolina runs a principal assessment center designed to screen candidates and train future principals.

States also could alter their criteria for selecting and certifying principals. In most states, principals must complete courses in finance, law, budgeting, politics, and "rational decision making" to be certified. But "rational decision making" is at odds with the work principals actually do, and the rest of the training has little to do with instructional leadership. Principals need to know about effective teaching, know how to observe it in classrooms, be skilled at clinical supervision, know how to develop an integrated school-wide curriculum, understand the technical and interpersonal components of the change literature, and judge the effect of management and administrative decisions on the instructional program. These are the kinds of competencies that need to be included in certification requirements. These competencies should dominate selection criteria, but usually do not (Baltzell and Dentler 1983).

Finally, all standards for entry into the education profession may need to be upgraded. The executive functions of teaching are complex. Good instructional leadership in schools is a demanding job. Brains and ability count. Neither the status of the profession nor the quality of its output can be improved dramatically if the students who become teachers continue to come from the bottom quartile of ability, if the profession is not seen as a full-time occupation, and if training for teaching is not at the graduate level.

State Data Gathering

States have rapidly expanded programs to test students and teachers. Maryland and Michigan have funded research on school effectiveness. California funded a major evaluation of its school improvement program. But few, if any states, have developed comprehensive programs to evaluate school improvement programs or to identify effective schools.

As has Colorado, states could develop indicators of effective schools and districts. Many districts across the country now use the Colorado instruments; California is developing similar instruments. (Districts generally cannot afford to create instruments that are valid and provide useful information.)

States also could gather and disseminate indicators of school effectiveness on a school and district basis, as a way of broadcasting excellence and pressuring less effective schools to do better. Indicators of school effectiveness are much broader than test scores. Ohio, for example, has developed eight indicators of success to monitor district progress in its state school improvement program.

Further, states need to expand the formative monitoring of school

improvement programs to identify problems, document obstacles, outline new ways to proceed, and describe impacts. The results of this monitoring could be supplied directly to a technical assistance unit that helps districts and schools work out implementation problems. South Carolina has created such an "education reform implementation" unit in the state education department.

FINAL COMMENTS

If states take the school effectiveness research seriously, they must be prepared to see state goals reached differently in each school. As Finn (1984) puts it, effective schools need strategic independence from state and district controls, although they can be held to uniform goals and standards. Effective schools will look different from one another. State leaders should prepare for nonuniformity of appearance while insisting on uniform objectives.

Furthering education reform—which goes beyond school improvement—is not cheap, and the lofty goals of the national reports will not be reached unless more money is allocated to education. While most reasonable estimates of the cost of education reform suggest the need for an additional 20 to 25 percent of resources, reform programs in most states—even states that raise taxes significantly—now receive only an extra 10 to 15 percent (Odden 1984). Education reform goals need to be scaled down, or new ways (such as expanded use of computer technologies) need to be found to provide educational services at lower cost. Otherwise public expectations for education renewal will not be met, no matter how great the use of research on school effectiveness.

REFERENCE NOTES

1. **Effective Teaching.** Comprehensive reviews of the effective teaching research include T. Good, Research on Classroom Teaching, in L.S. Shulman and G. Sykes, eds., 1983, *Handbook of Teaching and Policy*, New York: Longman, on teacher expectations and attitudes; J.E. Brophy, 1983, Classroom Organization and Management, *Elementary School Journal 83* (4), on classroom organization and management; B. Rosenshine, 1983, Teaching Functions in Instructional Programs, *Elementary School Journal 83* (4), on teaching strategies; and an overall review by T. Good, B.J. Biddle and J.E. Brophy, Teaching Effectiveness: Research Findings and Policy Implications, paper prepared for the National Institute of Education, 1983.

2. **Effective Principals.** Syntheses of research on effective principals include J.W. Little, 1982, The Effective Principal, *American Education 18* (7); L.A. Manassee, Improving Conditions for Principal Effectiveness: Policy Implications of Research on Effective Principals, paper prepared for the National Institute of Education, June 1983; and C.H. Persell, Effective Principals: What Do We Know from the Research Literature?, paper prepared for the National Institute of Education, June 1982.

3. **Effective Schools.** A much cited synthesis of effective school research is S.C. Purkey and M.S. Smith, 1983, Effective Schools: A Review, *Elementary School Journal 83* (4). Articles on effective secondary schools include E. Farrar, M.B. Miles and B. Neufeld, A Review of Effective Schools Research: The Message for Secondary Schools, paper prepared for the National Commission on Excellence in Education, Cambridge, MA: The Huron Institute, January 1983; J. Lipsitz, 1983, *Successful Schools for Young Adolescents*, Chapel Hill, NC: University of North Carolina at Chapel Hill; M. Rutter et al., 1979, *Fifteen Thousand Hours. Secondary Schools and Their Effects on Children*, Cambridge, MA: Harvard University Press; and J. Stallings et al., 1978, *A Study of Basic Reading Skills Taught in Secondary Schools*, Menlo Park, CA: SRI International.

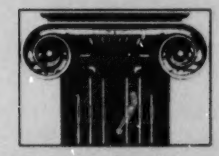
4. **Educational Change.** A recent review of educational change literature is M. Fullan, Change Processes and Strategies at the Local Level, paper prepared for the National Institute of Education, July 1983. Large-scale studies of federal programs supporting educational change include D.

Crandall et al., 1983, *People, Policies and Practices: Examining the Chain of School Improvement,* Andover, MA: The Network; and K.S. Louis and S. Rosenblum, 1981, *Strategies for Knowledge Use and School Improvement.* Washington, DC: National Institute of Education.

5. **State and Federal Program Implementation.** The most recent studies of the implementation of state and federal categorical programs include M. Knapp et al., *Cumulative Effects of Federal Education Policies on School Districts,* Menlo Park, CA: SRI International, January 1983; A.M. Milne et al., 1982, *Serving Special Needs Children: The State Approach,* Washington, DC: Decision Resources; M.T. Moore et al., *The Interactions of Federal and Related State Education Programs,* Washington, DC: Educational Policy Research Institute, February 1983; and L. McDonnell and M.W. McLaughlin, *Educational Policy and the Role of the States,* Santa Monica, CA: The Rand Corporation, May 1982.

6. **State School Improvement Programs, Their Costs Impacts.** A comprehensive listing of state programs of school improvement is A. Odden and V. Dougherty, 1982, *State Programs of School Improvement: A Fifty State Survey,* Denver, CO: Education Commission of the States. An analysis of the costs of state education reforms is A. Odden, 1984, *Education Finance in the States: 1984,* Denver, CO: Education Commission of the States. Studies of the impact of state school improvement programs include D. Burnes et al., State Initiated School Improvement: December 1983; and J.M.E. Roberts and J.L. Kenney, *Instructional Improvement in Maryland: Impact on Educators and Students,* Philadelphia, PA: Research for Better Schools, January 1984.

PART II



A DIRECTORY OF PROGRAMS PROMOTING EFFECTIVE PRACTICES AT THE CLASSROOM AND BUILDING LEVELS

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A DIRECTORY OF PROGRAMS

MATTHEW B. MILES AND TANYA KAUFMAN
Center for Policy Research

This *Effective Schools Sourcebook* provides an extensive, state-of-the-art review of the key ideas and concepts from the effective schools literature, and suggests a number of guidelines for school improvement efforts. It brings together more information about effective schools programs than has appeared in any single source up to this time.

As such, it may be a bit overwhelming. Readers may wonder, "What can we *do* with all this information? What does it mean for our school, our district? Where do we start?" Fortunately, given the intensive work that has gone on during the past five years to develop workable effective schools programs, we do *not* have to reinvent the wheel. There are many well-developed effective schools programs that have been shaken down through careful testing in school districts, and can be used in other districts and schools.

It should be pointed out immediately that the process of starting to use an effective schools program in a district or school building typically takes serious time and effort. Such programs are not "instant solutions." Effective schools programs demand an investment of time and energy sustained over several years, unlike many classroom-specific innovations, or conventional inservice training approaches.

Ordinarily, administrators and teachers who are interested in moving their schools in a more effective direction will need to make a careful assessment of the needs they are trying to meet, consider the unique or special aspects of their situation, look for programs that appear promising, and collect further information about the programs. They will also ordinarily find that nearly any externally-developed program will require some adaptation to meet the demands of the local situation.

This section of the Sourcebook is designed to help with the process of launching local use of effective schools programs. It is a Directory of currently available effective schools programs, as of September 1984. It includes 39 programs; 13 of them were developed by local school districts, 9 of them by state departments of education, and 17 by other organizations, including regional laboratories, universities, and research institutes. These programs are in current use in 1,750 school districts, and a total of 5,228 elementary, 1,424 middle/junior high, and 824 high schools, or well over double the number of schools found by Miles, Farrar, and Neufeld (1983).

The effective schools movement is expanding steadily, it seems.[1] Beginning with empirical studies of successful inner-city elementary schools, it has moved rapidly to rural and suburban settings as well, and to the secondary level. Many observers consider it one of the most practical and powerful approaches to school improvement now available.

The remainder of this introduction, in turn, (a) explains how the Directory is organized and how to use it, (b) discusses the criteria used to select programs, and (c) describes the procedures followed to collect data and report the results.

---

[1] In comparison with data collected a year ago by Miles, Farrar, and Neufeld, the total figure of 7476 schools is heavily weighted by the addition of the large-scale California program (869 districts and 3363 schools). If it is not included, the total is 881 districts and 4113 schools. Per program, that averages out to 23 districts and 105 schools that are being served by the average program.

How the Directory is organized.

The 39 programs are organized alphabetically by state of the *developer.* Within each state, they are organized alphabetically by *name* of the developer's organization. Each program is given a number to facilitate indexing.

Most of the programs are in fact being used in many states. Therefore, an index is included which enables the user to access programs in the following ways:

- by the state or city of the developer;
- by the state, or the district, of the sample users who are listed as contacts;
- by the name of the developer's organization;
- by the title of the program.

For each program, the following information is provided:

1. Title of the program.
2. Developer's address.
3. Sponsor of the program (usually though not always, identical with developer).
4. Objectives/needs addressed: the objectives and aims of the program; the populations and school levels for which it is designed.
5. Past users of the program: number and type of school districts (rural, urban, suburban; socioeconomic and minority status), and number and type of schools. These data relate to the 1983-84 school year.
6. Names and phone numbers of current users (as of September 1984) who may be contacted for further information.
7. A program overview, including background and development, current operating procedures, and available assistance and resources.
8. The conditions required for effective implementation, both at entry to the program and during subsequent routine operations.
9. Features of special interest; strong or unique points of the program.
10. Costs, in terms of dollars and time, for both the start-up period and regular operations.
11. The program's impact, as judged both by the developer and by other evaluative means, such as test scores, independent studies and user testimony.
12. Materials available, including manuals, instruments, research reports, articles, audiovisual materials, and so forth.
13. Person(s) who can be contacted for authoritative information on the program (usually the developer or a staff member), including address and telephone information.

To use the Directory, access programs by any of the means noted above. Read particular descriptions with emphasis on whether the program has been used with populations similar to those in your school, district, or state, and whether its features are a good fit with your situation. For programs that look promising, initiate further phone contact with users or the developer; request materials or other information. Further details on the procedures for program adoption and local adaptation can be obtained from the developer.

Criteria for inclusion.

This Directory includes programs that meet, to the best of the authors' knowledge, the following criteria. They:

1. Are grounded in a base of research knowledge, mainly about effective schools, but also about effective teaching.
2. Have an emphasis on change at the building level (are not just training for isolated individuals).
3. Are currently operating, during the 1984-85 school year.

4. Have been implemented for at least one full school year, in more than one school.
5. Have clear, well-developed procedures, embodied in supportive materials.
6. Have adequate provision for data collection and analysis as a basis for school self-diagnosis and planning.
7. Have adequate provision for supportive training and consultation, including follow-up.
8. Have staff members with active interest in diffusing the program to other users, beyond their school, district, or state.
9. Have supplied names of specific current users of the program who can respond to inquiries from potential new users.

It should be stressed that this Directory does not award "stars" or attempt to differentiate among programs as to their quality. Each of the 39 programs simply meets the criteria indicated above.

In addition, attention was given to 10 programs which were in development or revision. These programs usually did not meet criteria 4, 5, or 8. However, they appear promising, and are listed in Appendix 1.

What programs were *not* included? Thirty other programs, which were carefully reviewed, fell into several types:

1. Those that did not meet one or more of the criteria above.
2. Those programs that appeared to be secondary adoptions of some other existing program, but with little or no adaptation.
3. Those that came to our attention too late for inclusion in the Directory, and/or failed to respond to requests for materials.
4. Those that were not, at heart, effective schools programs, including those with a central accountability emphasis; those that were solely "monitoring" programs to detect conformity to a state or district mandate; and those that focused centrally on accreditation.
5. Those that seemed primarily to be "inservice" programs aimed at individual teachers, even though they often were found as a component of larger effective schools programs.

This last category of programs occurs widely, and has been discussed carefully by Stallings in her chapter in this Sourcebook. The reader is referred in particular to:

Active Teaching
(Tom Good, University of Missouri)
Effective Classroom Management
(Carolyn Evertson, Vanderbilt University)
Cooperative Learning
(Robert Slavin, Johns Hopkins University)
Increasing Teacher Effectiveness Training Program
(Madeline Hunter, University of California at Los Angeles)
Mastery Learning
(Benjamin Bloom, University of Chicago)

This Directory, the authors believe, identifies the majority of currently-existing effective schools programs which meet the criteria specified. Appendix 2 describes the data collection and reporting procedures used to prepare the Directory. As this Sourcebook is updated in later editions, it is expected that additional programs will be included.

Appendix 1

PROMISING PROGRAMS (IN DEVELOPMENT OR REVISION AT PRESENT)

Program developer and title	Contact	Phone
Glendale, AZ Union High School District Effective Schools Project	Mac Bernd	(602) 435-6052
Arizona Department of Education, AZ Arizona's Best Bet: Effective Schools	Lettie Cale	(602) 255-5008
San Francisco, CA Unified School District Targeted Schooling Project	Carol Choy	(415) 565-9701
Boston, MA Public Schools School Improvement Program	Claryce Evans	(617) 726-6200
Jackson, MS Public Schools Effective Schools Research Project	Robert Fortenberry	(601) 354-0373
Spencerport, NY Public Schools More Effective Schools Teaching Project	Robert Sudlow	(716) 352-3421
Memphis, TN Public Schools School Improvement and Marketing	Lynda Sklar	(901) 454-5338
Memphis, TN Public Schools Memphis Effective Schools Project	Roberta Radcliff	(901) 454-5444
Texas Education Agency, TX Training in Instructional Leadership	Charles Nix	(512) 475-2275
Pasco School District 1, WA Effective Schools Project	Stephanie Tesch	(509) 547-9531

Appendix 2

DATA COLLECTION AND REPORTING PROCEDURES

The data for this Directory were collected during the period March through August, 1984. Detailed telephone interview guides were developed to cover essential aspects of the programs. Guide 1 requested preliminary information to ensure that a program fell within our criteria, and concluded by asking that we be sent materials for review; Guide 2 collected additional detailed information.

Each guide took from 30 to 45 minutes to administer in a telephone conversation with a person knowledgeable about the program—typically, its developer. Guides 1 and 2 were sometimes combined in a single interview when we already had materials and previous information sufficient to make an inclusion decision.

The initial sample interviewed comprised the 39 programs found in a prior study of the adoption of effective schools programs (Miles, Farrar, and Neufeld 1983). We proceeded, via "snowball sampling" techniques and nominations from many persons knowledgeable about the field, to locate the total of 79 programs contacted. The programs in this Directory include 24 from the 1983 study, plus 15 added programs.

Following interview 2, the program was described in a standard written format, relying on the materials as well as the interview responses. This profile was then sent to the interviewee for correction and revision to ensure that it represented an accurate description for potential users of the program. The finally-revised version appears in the Directory.

PROGRAM FOR EFFECTIVE TEACHING (PET)

1

Arkansas Department of Education, General Division
Management and Development Division
State Education Building
Little Rock, AR 72201

SPONSOR: Arkansas Department of Education, General Division

OBJECTIVES/NEEDS ADDRESSED

The Program for Effective Teaching is a voluntary inservice program designed to improve the teaching and supervision skills of Arkansas educators. Its goals are to raise student achievement, increase teacher effectiveness, and strengthen principals' instructional supervision abilities. The program aims to create a state-wide inservice model, by helping districts initiate PET cycles and develop local training capacity. A secondary goal is to develop a common language of teaching and learning, by involving state department personnel and professors from teacher training institutions in PET activities.

USERS OF THE PROGRAM

The program is in use in 300 Arkansas districts, most of them small and rural. Teachers and principals in over 1,000 schools have received PET training. Sixty percent are elementary shools, 25 percent middle or junior high schools, and 15 percent high schools. The socioeconomic status mix ranges from middle class to blue-collar/unskilled, with at least 50 percent in the lower income ranges. Minority percentages are from 0 to 20 percent black.

Users who may be contacted for further information are:

Ester Crawford, Director, Elementary Education, North Little Rock School District, AR (501) 758-1760

Ross Beck, Assistant Superintendent for Instruction, Texarkana School District, AR (501) 772-3371

PROGRAM OVERVIEW

Background. The instructional model is based on Bloom's learning taxonomy and theory of mastery learning, and effective teaching research (Madeline Hunter). A classroom management dimension, drawn from the work of Carolyn Evertson, has recently been added to the training cycle.

The Program for Effective Teaching was developed by Don Roberts, Director of the Arkansas Department of Education, in 1979. The progam was initiated by a consortium of the state department, local districts and institutions of higher education. Thirty-five educators were trained in the first PET cycle in 1979; by 1984 over 12,000 teachers and principals have participated in PET cycles.

Procedures. PET's instructional skills component focuses on strategies to increase teacher effectiveness. Activities include training in appropriate selection of learning objectives, teaching to the objective, maintaining the student's focus on the objective, and monitoring student progress. The Program for Effective Teaching also provides training in questioning techniques, in using Bloom's taxonomy, and in four components of learning: motivation, reinforcement, retention, and transfer. Principals participate in instructional skills workshops, and are also trained in techniques of clinical supervision. PET cycles include teachers, principals, district administrators and college/university professors.

Each 25-day PET cycle has four stages: instruction, practice, observation and feedback. Six to seven days (35 hours) are devoted to actual instruction by the trainer. The remaining time is spent practicing the skills in classroom/supervisory settings. Teachers are observed by trained PET observers, and participate in conferences during the practice sessions. Principals who take the instructional skills component must also teach classes and be observed.

Smaller districts can train all teachers and supervisors during a 6-month period. It can take from 2 to 3 years to complete PET cycles with all staff in much larger districts. Once training is completed, districts enter a maintenance phase.

Assistance and resources available. The Arkansas Department of Education coordinates and monitors district-wide PET cycles, and sponsors an annual state-wide conference, plus eight regional seminars for PET instructors/observers. A program newsletter, "The Lesson Line," is available to all trainers, observers and superintendents. Written guidelines and procedures for implementing PET cycles are available to participating districts.

PET is limited to Arkansas schools, but the support staff is willing to supply advice regarding adaptation.

CONDITIONS REQUIRED FOR EFFECTIVE IMPLEMENTATION

Entry. The program is voluntary at the state level, although some districts have required all teachers and principals to complete one PET cycle. A district commitment to train local PET instructors and observers is necessary. Central office staff and building administrators must assume leadership roles in the district's maintenance program.

Operations. Teachers/principals agree to attend the instructional sessions, practice the strategies in classroom or supervisory settings, be observed during practice experiences, and have conferences with observers and instructors. The district is responsible for arranging training sessions, providing substitutes, and scheduling observation activities.

FEATURES OF SPECIAL INTEREST

The program represents an intensive, thorough

approach to instructional improvement at the school building level that integrates several widely-available inservice programs into a comprehensive, state-wide system. The cooperative efforts of the Arkansas Department of Education, local districts, and colleges and universities have contributed to PET's success. A common framework and terminology for improving instruction have emerged through the involvement of all groups. The voluntary expansion of PET throughout the state has accounted for substantial growth in student achievement since its inception in 1979.

COSTS

Start-up. Time costs for teachers/principals who attend the instructional sessions total 35 hours. Districts are responsible for all substitute costs.

Operations. Time costs for practice, observation and conferencing activities total approximately 90 additional hours. These activities are conducted at the local site. Substitutes may be required for teachers during conferencing sessions with PET instructors.

District costs for training PET instructors/observers vary from $0 to $1,000, depending upon training arrangements and consultant services required. Prospective trainers/observers can attend PET cycles in neighboring districts, thus reducing total costs.

Instructors are required to complete three PET cycles (105 hours of instruction), conduct supervised observations and conferences, and accept teaching responsibilities during the third cycle.

PROGRAM IMPACT

Developer estimate. PET's expansion throughout the state has led to increased participation of teachers (60 percent of all in state), principals (75 percent), and university professors (50 percent). Teachers who have completed PET cycles report better use of instructional time, increased student response rates, and improved classroom management skills.

Other evaluative data. Increases in student achievement on standardized and criterion-referenced tests have occurred throughout the state. Students in districts where PET has been implemented have moved from below national norms to meet national averages. An Education Commission of the States study (October 1983) reports that PET has "helped bring about a more collegial atmosphere; enabled principals to become more active instructional leaders; and developed an esprit de corps within and among school districts and schools."

MATERIALS AVAILABLE

Arkansas Program for Effective Teaching: Guidelines and Procedures for Implementing PET. (available only to participants)

Holmes, M. Effective Teaching: Arkansas' School Improvement Strategy. Paper read at AERA meetings, New Orleans, 1984. (no charge)

Odden, A. 1983. School Improvement in Arkansas: A Case Study. (Order from Education Commission of the States, Suite 300, 1860 Lincoln Street, Denver, CO 80295. $4.00)

CONTACT FOR FURTHER INFORMATION

Dr. Morris Holmes, Associate Director, Management and Development Division, Arkansas Department of Education, State Education Building, Little Rock, AR 72201. (501) 371-1561.

SCHOOL IMPROVEMENT PROGRAM (SIP)

2

California State Department of Education
Office of School Improvement
721 Capitol Mall
Sacramento, CA 95814

SPONSOR: California State Department of Education

OBJECTIVES/NEEDS ADDRESSED

The School Improvement Program seeks to improve instruction broad-based collaborative planning, involving all members of the school community. The primary focus is on meeting student needs by improving curriculum, instructional methodology, and the operation of existing school programs.

USERS OF THE PROGRAM

The program is in current use in 869 California districts, representing city, suburban and rural areas. There is a wide range in socioeconomic status. Average minority percentages are 56 percent white, 26 percent Hispanic, 10 percent black, 8 percent other (source: Education Commission of the States Report).

Some 3,363 schools throughout the state are participating in SIP. Approximately 200 of these are high schools. SIP support was received by 50.4 percent of all districts, for students in grades seven and eight; some of these were schools with kindergarten through eighth grade, others in separate middle schools or junior high schools. Precise figures on the breakdown by school level are not available.

Users who may be contacted for further information are:

Tate Parker, Principal, Valley Elementary School, Poway, CA (619) 748-2007

Margaret Edgelow, Board member, New Haven Unified School District, Union City, CA (415) 471-1100

Pauline Hopper, Assistant Superintendent, Office of Compliance, Los Angeles Unified School District, CA (213) 625-6801

PROGRAM OVERVIEW

Background. The current program was developed in 1977, as an outgrowth of earlier legislation (1973) enacted to improve early childhood education. Policies and procedures for implementation were developed at the state level, based upon identification of local needs. Although the original early childhood effort preceded the effective schools movement, this research was utilized in refining and expanding the program (Edmonds, Lezotte, Brookover).

Procedures. All California districts have the option of participating in school improvement programs pursuant to provisions in recent legislation (Senate Bill 813, Sections 98-99). School site councils can apply for planning grants through the district to initiate a local improvement program. Site council members (teachers, parents, auxiliary staff, student representatives) are selected by their constituents. The principal is also a member of the site council.

Site councils are responsible for assessing the effects of current instructional programs on students. Information from program review reports (conducted by the state at each school every 3 years), as well as additional survey data collected at the school site, is examined. School profiles (achievement/attendance data and other locally determined indicators) are utilized during the assessment phase.

Once priority areas in need of improvement are determined by the site council, a school improvement plan is developed. Components include goals, specific improvement activities, time lines, resource allocation and evaluation procedures. Elementary schools must address improvements in all curriculum areas within 3 years. Secondary schools have a 5-year time period. Schools are required to plan staff development programs to support improvement activities.

The school site council is responsible for monitoring the implementation of school plans. Site councils conduct ongoing evaluations, using state program review materials, and revise plan components. Districts are responsible for developing a master plan, keyed to school improvement objectives at local sites, and for evaluation of program effectiveness.

Assistance and resources available. The state offers cash incentives to support improvement planning. Districts receive $30 per student at each proposed SIP site during the assessment and planning stages, and approximately $82 per student in kindergarten and grades one through six during the implementation phase. Districts receive $97.48 per student in grades seven and eight, and $70.39 for each student in grades nine through twelve. Funds can be utilized to pay for resources needed to implement the agreed-upon SIP activities, including (but not limited to) personnel. Such funding must be used to supplement materials and services provided by the district.

Regional training sessions are offered for district facilitators responsible for training local personnel and site councils and for providing ongoing support. Additional resources throughout the state have been identified to provide technical assistance, including teacher education institutions and county offices of education.

Written materials are available for support training and implementation activities (Quality Criteria for Program Review, Handbook for Conducting a Program Review, School Program Development Manual, Guide for Developing the District Master Plan).

CONDITIONS REQUIRED FOR EFFECTIVE IMPLEMENTATION

Entry. Principals, staff and parents must be committed to shared responsibility for school improvement and be willing to delegate authority to site councils. The program requires a school-wide commitment to cooperative planning and willingness of staff to "look beyond their classrooms." District support is required to implement SIP effectively.

Operations. Willingness to attend site council meetings, to fulfill responsibilities, and to monitor plans is required of council members. Sustained staff/parent/administrative/district commitment to the process is needed.

FEATURES OF SPECIAL INTEREST

The site council provides a unique vehicle for collaborative planning activities. The program is designed to serve all segments of the school population, and address all curriculum areas. The availability of the program review documents/evaluations provides additional data for use in assessment and planning stages. Districts have the options of using the 8 inservice days for planning/training activities, thus reducing the need for substitutes, and providing available time during school hours.

COSTS

Start-up. Time costs for training local facilitators total 16 hours. Districts are responsible for providing staff to facilitate school improvement activities.

Operations. Time costs total 20 hours per year for site council meetings, plus staff time (30 hours per year) for participation in assessments, planning, and implementation. All site council meetings and inservice training take place during school hours. (Most California teachers are required to work an 8-hour day, including time beyond teaching responsibilities.) There are no dollar costs to California schools participating in the School Improvement Program.

PROGRAM IMPACT

Developer estimate. The program has resulted in increased parental involvement, more relevant inservice training, greater staff participation in school planning, and improved student achievement. Schools have shown a steady increase in reading, language and mathematics achievement on the CAP (California Assessment Program).

Other evaluative data. Each school participates in an external evaluation every 3 years. A state program review document, along with data collected during on-site observations and interviews, is utilized to compile review reports. Information from school reviews is used in assessing needs and planning improvement activities.

A recent program evaluation (Berman, Weiler Associates, 1984) reports that the schools most likely to improve were those where the SIP process was implemented in accordance with the state's process model, and where district support was provided in ways that were facilitative or directive rather than controlling.

MATERIALS AVAILABLE

Quality Criteria for Program Review (in revision, available 1985). ($1.50)

Handbook for Conducting a Program Review (in revision, available 1985). ($1.50)

School Program Development Manual (in revision, available 1985). ($7.00)

Berman, Weiler Associates. 1984. Evaluation Report: Improving School Improvement: A Policy Evaluation. ($8.00)

CONTACT FOR FURTHER INFORMATION

Margaret Gaston, Director, School Improvement Program, Office of School Improvement, California State Department of Education, 721 Capitol Mall, Sacramento, CA 95814. (916) 322-5954.

John Stradford, Consultant, Office of School Improvement. (916) 322-5954.

Jim McIlwrath, Consultant, Office of School Improvement. (916) 322-5954.

QUALITY SKILL BUILDING PROGRAM: SECONDARY LEVEL (QSB)

3

Los Angeles Unified School District
644 West 17th Street
Los Angeles, CA 90015

SPONSOR: Los Angeles Unified School District

OBJECTIVES/NEEDS ADDRESSED

The Quality Skill Building program emphasizes "precise teaching," through an outcome-based process, where precise instructional objectives become the focus for classroom instruction. The program is designed to accomplish four objectives: enhance teacher effectiveness; promote a common research-based framework for analyzing the teaching/learning process; identify specific classroom practices that yield maximum results; and promote discussion among professionals. The ultimate goal is to improve the instructional program.

USERS OF THE PROGRAM

The program is currently used by 49 regular senior high schools and 43 continuation schools in the Los Angeles Unified School District. Socioeconomic status and minority percentages vary throughout the city. At least 141 different ethnicities are represented, The district is predominantly minority (over 50 percent) and includes a large percentage of Hispanic, black and Asian students.

Users who may be contacted for further information are:

Richard Valadovic, Principal, Locke Senior High School, Los Angeles, CA (213) 757-9381

Philip Breskin, Principal, Southgate Senior High School, Los Angeles, CA (213) 567-2333

Warren Steinburg, Principal, Fairfax Senior High School, Los Angeles, CA (213) 651-5200

Richard Browning, Principal, Westchester Senior High School, Los Angeles, CA (213) 670-4003

PROGRAM OVERVIEW

Background. Implementation was preceded by a review of effective staff development programs (Rand) and identification of successful teaching techniques. The research base includes teacher effectiveness literature (Hunter, Stallings, Kerman), higher level thinking skills (Bloom), cooperative learning (John Hopkins University), precise teaching (Abrams), modality strengths (Barbe, Milone, Reckinger), coaching (Joyce), and successful high school programs (Possemato). QSB was initiated in 1979.

Procedures. Quality Skill Building is required of all senior high schools in the Los Angeles Unified School District. A turnkey training approach is utilized to enable key teachers and school administrators to train all staff members.

A plan for operationalizing Quality Skill Building training at the school site is designed by trained teachers and administrators. Before this, key teachers (selected by the principal) receive 32 hours of training in Quality Skill Building activities. Components include: strategies of effective teaching; planning a teacher-directed instructional sequence; analyzing and developing instructional objectives; and designing classroom activities for students with varied abilities/modality strengths. A personal inventory (needs assessment) is conducted during training to collect base-line data regarding prior teacher knowledge/experience in each instructional component.

A complementary program in Supervision of Instruction is offered for administrators (principals, assistant principals, head counselors and deans). Training focuses on a systematic approach for observing, identifying and analyzing effective teaching practices. The same research base and theoretical framework are used to develop both programs, providing a common language for instructional issues.

A plan for operationalizing Quality Skill Building training at the school site is then designed and implemented by trained teachers and administrators, according to individual plans.

A district-wide Quality Skill Building steering committee of teachers from local schools meets at the end of each year to review workshop evaluations and examine recent research in order to revise/update program activities and training materials.

Cadre training, requiring 32 hours, can be conducted during a one-month period. The process of training an entire school staff varies, but can usually be completed within one school year. The program's goal is to train all high school teachers within a 5-year period.

An elementary Quality Skill Building program follows a similar process. Participation is voluntary at this level.

Assistance and resources available. An instructional unit of high school advisors conducts sessions for on-site trainers and offers technical support to schools on an "as needed" basis. A comprehensive manual, training scripts, and print materials are provided during cadre training. A bank of videotapes (teachers modeling instructional techniques) is available for district-wide use. Program staff develop individualized videotapes at school sites, which are used during local workshops. Meetings with all cadre trainers are held four times a year, to share information/school updates. A Quality Skill Building bulletin for administrators and trainers describes effective staff development programs and recommended training strategies.

The program is limited to the Los Angeles Unified School District, but the support staff is willing to supply advice regarding replication.

CONDITIONS REQUIRED FOR EFFECTIVE IMPLEMENTATION

Entry. School site commitment to train teachers/administrators and willingness of the cadre group to develop a school-wide Quality Skill Building program are needed.

Operations. The program requires commitment of the principal to support and monitor program implementation, along with staff commitment to "own their program," and carry out Quality Skill Building activities and instructional strategies.

FEATURES OF SPECIAL INTEREST

Yearly reevaluations and revisions of QSB by teachers make this a renewable, up-to-date, "non-static" program. Local school adaptations and the emphasis on creation of school-specific and individualized training designs allow for ownership, as well as development of programs that meet local school needs. Quality Skill Building is mandated for all high schools, creating a common framework for instruction throughout the district. Training is held at the school site, providing opportunities for teachers to observe colleagues practicing Quality Skill Building skills in the classroom.

COSTS

Start-up. Training for administrators and key teachers totals 32 hours. Principals are responsible for arranging teacher coverage if training occurs during school hours. Teachers have the option of attending a QSB course on Saturdays and receiving college credit.

Operations. Time costs for follow-up meetings of administrators and key teachers vary at each local site. Discussions may be extended if the group wishes to develop ancillary materials and explore additional resources. Inservice training for staff totals 16 hours. Sessions are conducted during 10 staff development days provided to California schools.

There are no dollar costs to Los Angeles Unified schools participating in the Quality Skill Building program.

PROGRAM IMPACT

Developer estimate. The program has resulted in improved teacher understanding of the learning process, increased emphasis on maximum use of instructional time, and greater communication between teachers and administrators regarding instructional issues. Teachers have become more precise and organized through the use of a systematic instructional process. Training has been individualized to address shared concerns at each school site. Participants have had opportunities to practice strategies and obtain feedback from colleagues and administrators.

Other evaluative data. Training evaluation forms, reviewed by the Senior High School division and trainers, serve as the foundation for ongoing program revision. Principals submit QSB program reports every 20 weeks.

A Bank of America grant has provided funds to conduct a comparative analysis of Quality Skills Building in one school. Results will be available in June 1985.

MATERIALS AVAILABLE

Quality Skill Building manual (Secondary Instruction), September 1983. (available only to QSB participants)

Secondary Quality Skill Building Training Script. ($0.60)

Videotapes illustrating precise teaching instructional strategies. (individual tapes, $175; set of three tapes, $500)

Possemato, P.M. March 1984. The Elements of a Successful Senior High School and the Indicators of Excellence ($0.60)

Possemato, P.M. Common Sense Principles. ($1.90)

CONTACT FOR FURTHER INFORMATION

Joan Evans, Director, Secondary Quality Skill Building Program, Los Angeles Unified School District, 644 West 17th Street, Los Angeles, CA 90015. (213) 742-7501.

Dr. Paul M. Possemato, Division Superintendent, Senior High Schools Division, Los Angeles Unified School District. (213) 742-7501.

SAN DIEGO COUNTY EFFECTIVE SCHOOLS PROGRAM

4

San Diego County Office of Education
6401 Linda Vista Road
San Diego, CA 92111-7399

SPONSOR: San Diego County Office of Education

OBJECTIVES/NEEDS ADDRESSED

The San Diego County Office of Education has developed a comprehensive system for implementing effective school characteristics in its schools. The process is focused at the building level, and includes an examination of the structure of the school and its instructional program. The primary goal is to increase student achievement through a systematic process of needs identification, goal-setting and collaborative planning.

USERS OF THE PROGRAM

The program is in current use in 35 San Diego County districts, 60 percent of which are suburban, 20 percent rural, and 20 percent urban. There is a wide socioeconomic status range. Student minority percentages range from 10 to 100 percent black and Hispanic. Eighty schools are involved, including 75 elementary and 5 middle/junior high schools. The program has attempted to enter at least one school in each district.

Users who may be contacted for further information are:

Fred Wise, Principal, Richland Elementary School, San Marcos, CA (619) 744-1602

Larry Layton, Principal, Pacifica Elementary School, Oceanside, CA (619) 757-3626

Bruce DeMitchell, Principal, Ocean Knoll School, Encinitas, CA (619) 753-5252

PROGRAM OVERVIEW

Background. The program is based upon effective schools research (Edmonds, Lezotte, et al.), as well as research on classroom teaching (Evertson, Stallings, Good), organizational development (Miles), and educational change. It was introduced by a team from the San Diego County Office of Education in 1982.

Procedures. There are three basic steps: Assessment, Action Planning, and Implementation. Once a school has agreed to participate, a comprehensive needs assessment of the current status of each of seven effective schools factors is conducted by a team from the program office. Instruments used include the Connecticut School Effectiveness Questionnaire/Interview, a modified Climate Survey from the Association for Supervision and Curriculum Development, and a locally-developed parent survey. Data from achievement tests, classroom time audits, and additional interviews and surveys are also analyzed as part of the total assessment process.

A school profile, including a narrative and graphic portrayal of the school's status on each factor, is prepared. At this stage, a school team is formed to work with program staff in developing an action plan. The plan outlines activities to implement effective school characteristics and increase student achievement. Implementation is ongoing, and may include programs to improve instruction, inservice training, school operations and parental involvement. Evaluation of plan activities is built into the process.

Assistance and resources available. Program staff conduct and coordinate the needs assessment process (3 to 4 full days per school) and compile profile results. A team leader from the program office provides consultant services (from 1 full day per week to 1 per month). Consultant time varies from school to school, determined by need and implementation requirements. Twenty-five inservice modules are offered to support improvement efforts. Topics include raising expectations, classroom management, interactive instruction, curriculum alignment, student motivation, and instructional leadership. A videotape and school effectiveness program manual are designed to assist districts/schools in implementing the process.

The program is limited to schools in San Diego County, but support staff is willing to supply advice regarding replication.

CONDITIONS REQUIRED FOR EFFECTIVE IMPLEMENTATION

Entry. Consensus from a "critical mass" of the staff is needed for program entry. The staff must be willing to engage in self-examination of their current practices/activities and agree to participate in the needs assessment process, including time-on-task observations.

Operations. Upon presentation of the school profile, the staff makes a statement of commitment to participate in a collaborative school improvement effort. Selection of a planning committee, staff involvement during plan development and improvement activities, and attendance at inservice programs are necessary for effective implementation. Parent cooperation in completing surveys mailed to homes is also essential.

FEATURES OF SPECIAL INTEREST

The program focuses on the individual school site as the unit of change, while providing ongoing district/county/state level support. The needs assessment process is comprehensive, collecting school effectiveness data through a variety of methods. Sixty staff members at the County Office of Education are involved in this effort on a part-time basis, and

services of additional district and university personnel have been identified and incorporated in the process.

COSTS

Start-up. Time costs include staff participation in all phases of needs assessment: written surveys, interviews, and observations (approximate total of 3 hours per person during a 3 to 4 day assessment period).

Operations. Time costs for planning teams (representatives from each grade level or department) total 3 to 4 days. The district is responsible for providing substitutes. Teams schedule additional meetings at local schools (hours vary). Attendance at inservice sessions is expected. Some districts offer stipends to participants; others utilize allocated staff development time. The program developer estimates that the total cost for the program, per school, averages $2,500.

PROGRAM IMPACT

Developer estimate. Most schools have shown clear impact on increased academic learning time, improved school climate/student behavior, and development of a collaborative planning process. The establishment of "clear school missions" has been a significant achievement. Through participation in such activities as "We Agree" consensus-building, staffs have begun to identify and agree on school priorities.

Other evaluative data. Evaluative studies are in progress. Examination of California Assessment Program results will enable schools to compare their achievement with matched schools in the state. Review of standardized test scores will provide an additional evaluation component.

MATERIALS AVAILABLE

Texts:

Chrispeels, J., and D. Meaney. *Building Effective Schools: A Guide for Assessing, Planning and Implementing.* San Diego County Office of Education. ($20.00)

Carney, J., and J. Chrispeels. *Schools and Communities: Working Together for Building Effective Schools.* San Diego County Office of Education, 1983. ($10.00)

Building An Effective School (videotape). ($95.00)

Project description and brochures. (no charge)

CONTACT FOR FURTHER INFORMATION

Dr. David Meany, Director, San Diego County Effective Schools Program, San Diego County Department of Education, 6401 Linda Vista Road, San Diego, CA 92111-7399. (619) 292-3718.

SCHOOL EFFECTIVENESS PROGRAM (SEP)

5

Santa Clara County Office of Education
100 Skyport Drive
San Jose, CA 95115

SPONSOR: Santa Clara County Office of Education

OBJECTIVES/NEEDS ADDRESSED

The purpose of the School Effectiveness Program is to enable all schools to manifest the student outcomes and environmental characteristics of effective schools. Through a system of assessment, the program compares a school's performance on four student outcomes and nineteen school effectiveness factors with the performance of a group of effective schools. Technical assistance services help schools plan and train for school improvement on school effectiveness factors.

USERS OF THE PROGRAM

The program is in current use in 11 districts within the county. Most of these are suburban; some are rural. The socioeconomic status mix is primarily middle class, with some upper class and blue-collar/unskilled representation. Minority percentages range from 8 to 15 percent and include Asian and Hispanic students. Sixty-four schools (K-7) are participating in the School Effectiveness Program.

Users who may be contacted for further information are:

Phil Barone, Superintendent, Cambrian School District San Jose, CA (408) 377-2103

Martha Gonzales, Principal, Sinnott School, Milpitas Unified School District, CA (408) 263-1282

Myra Castner, Principal, Blackford School, Campbell Union School District, CA (408) 378-3405

PROGRAM OVERVIEW

Background. Three years of extensive local research and development work, as well as examination of related literature, preceded the program's initiation in 1983. The research base includes school effectiveness research (Edmonds, Brookover, Lezotte), teacher effectiveness literature (Brophy, Rosenshine), process-outcome and educational productivity research (Medley, Walberg) and delinquency research (Weis). A local research study (Weil, et al.) comparing effective and typical schools contributed to the program's development.

Procedures. SEP is a voluntary program, open to any school within the county. An orientation session familiarizes participants with the process, program goals and data collection methods. A Basic School Profile is used as the starting point of the planning process. Teacher/student/parent surveys and demographic data are utilized in compiling computer-generated school profiles. The profile report compares the schools' results with the results of effective California schools, identified through local research. The printout charts effective school comparisons for nineteen effectiveness factors. Among factors related to *Learning Climate* are Opportunity to Learn, Expectations and Standards, Clear School Mission, Tightly Coupled Curriculum, Monitoring Student Progress, Student Rewards and Recognition, Home-School Relations, and Effective Instruction. *Social Climate* factors include Sense of Community, Safe and Orderly Environment, and Opportunity for Meaningful Student Involvement. Another important factor is *Instructional Leadership. Organizational Climate* factors include Collaborative Organizational Processes, Parent Satisfaction with School, and Job Satisfaction. Factors concerning *Home Environment* are Home Social Environment, Television, Home Educational Environment, and Parent Attitude toward Education. The profile also presents effective school comparisons on four educational outcomes: achievement, academic self-concept, attendance and school conduct.

Once a school has been profiled, the School Effectiveness Program offers a service called Action Planning, a 3-day Institute which provides assistance to the principal and school planning team in analysis of their Basic School Profile, in setting school goals, and in writing a plan for school improvement. After a school plan has been written, a school may contract for a Facilitator who will assist the school team in achieving their school improvement goals by providing ongoing support and feedback. Both services are also offered at the district level.

Schools may be profiled in the fall, winter or spring of each school year. A school receives its Basic School Profile approximately 6 weeks after survey administration. After the 3-day Action Planning Institute is completed, Facilitation is usually a year-long process.

Assistance and resources available. The Basic School Profile Service includes direction needed to gather necessary information and administer surveys, as well as assistance in interpreting the Basic School Profile.

Besides the Profile Service, Action Planning and Facilitation Services, School Effectiveness staff members offer training in effective schools research and practices, or related topics as needed by a district or school.

Current introductory training programs include: Clear School Mission, High Expectations, and Parent Involvement.

Several publications will be offered for sale by the end of the 1984-85 school year. Probable topics include: the SEP School Effectiveness Framework, Clear School Mission, High Expectations, Parent Involvement, and Guidelines for Implementation.

CONDITIONS REQUIRED FOR EFFECTIVE IMPLEMENTATION

Entry. The Basic School Profile Service, Action Planning Institute and Facilitation are voluntary. The program

assists schools in their decision to participate by giving a presentation on offered services before asking schools to commit to service.

Operations. The School Effectiveness Program requires a sustained commitment to school-based planning and willingness to contribute time to planning efforts.

FEATURES OF SPECIAL INTEREST

Questionnaire information is obtained from teachers, students, and parents, providing comparisons across role groups. The Basic School Profile presents student outcomes, and student, teacher, and parent perceptions, against a composite profile of instructionally effective schools within the state. During school improvement planning, this comparison provides a standard for decision-making and indicates what it is possible to achieve. Information on the four student outcomes is reported for the school as a whole and separately by student subgroups based on achievement, sex, grade, ethnicity, language dominance and socioeconomic level. In this way it is possible to isolate difficulties among specific subgroups of students. Finally, SEP is based upon a combination of national and local studies, with significant development work occurring prior to program implementation.

COSTS

Start-up. Initial time costs include 1½ hours for an orientation meeting and 4 to 10 hours for collection of student record data. Time required to complete the surveys ranges from 50 minutes (teacher and parent) to 100 minutes (student, in two sessions). A varying amount of time is required to conduct parent surveys, including preparation and distribution of materials to homes and organization of the returned surveys.

The Action Planning Institute is a 3-day session for school site or district teams. Time required for Facilitation varies, and is set by the individual schools.

Operations. The fee for the Basic School Profile Service ranges from $450 to $750, depending on profiling options and school size.

The fee for Action Planning is $600. Facilitation costs range from $600 to $3,000 depending on individual contracts and assistance required.

Training costs vary depending on number of days and number of staff members needed.

PROGRAM IMPACT

Developer estimate. The program has resulted in increased awareness of school effectiveness issues and high interest of participants. In one year, 20 percent of the schools in the county have volunteered to join SEP. A seven-session school effectiveness workshop was very well attended (over 200 participants). No formal evaluation is planned although impact can be determined by comparing school gain scores on educational outcomes and school effectiveness factors for a school that chooses to continue administering the school profile from one year to the next.

Other evaluative data. None currently available.

MATERIALS AVAILABLE

An Information Packet, which includes definitions of the 19 variables, sample surveys, and sample pages from the Basic School Profile. (available by written request at no charge)

Articles reporting the program research findings on effective schools. (available by request at no charge)

There will be a set of publications covering several topics offered for sale by the end of the 1984-85 school year.

A listing of all current publications was to be available by January 1985.

CONTACT FOR FURTHER INFORMATION

Dr. Marsha Weil, Program Director, School Effectiveness Program, Santa Clara County Office of Education, 100 Skyport Drive, (Mail Code 237), San Jose, CA 95115. (408) 947-6523.

Ann Carson, Coordinator for Profiling, Santa Clara County Office of Education. (408) 947-6897.

SCHOOL IMPROVEMENT THROUGH LEAGUES AND CLUSTERS

6

Colorado Department of Education
303 West Colfax
Denver, CO 80204

SPONSOR: Colorado Department of Education

OBJECTIVES/NEEDS ADDRESSED

The program seeks to improve the quality of education in participating schools through the operation of school improvement leagues and clusters, developed around three common unifying concepts: school climate, effective schools, and futuristics. Associations of individual schools and cooperating universities participate in league/cluster activities. Major cluster goals include: improving the extent to which research information is used in school improvement planning; strengthening skills needed to launch and manage school improvement projects; and improving the quality of teacher and administrator training programs in cooperating universities.

USERS OF THE PROGRAM

The cluster approach is in current use in 40 Colorado districts, most of which are urban/suburban, with some rural areas and small cities. There is a wide socioeconomic status range. Minority percentages run from 10 to 60 percent, mostly Hispanic, with some black, American Indian and Oriental representation. The program is in use in 110 schools: 74 elementary, 17 junior high/middle, and 19 high schools.

Users who may be contacted for further information are:

Mary Lou Zarlengo, Principal, Sunset Ridge Elementary School, Westminster, CO (303) 426-8907

Dr. Donald White, Superintendent, East Otero District, Lajunta, CO (303) 384-8907

Dr. Edmund Vallejo, Superintendent of Curriculum, Pueblo City School District 6, Pueblo, CO (303) 549-7100

PROGRAM OVERVIEW

Background. The current program, initiated in 1982, grew out of an earlier IGE (Individually Guided Education) effort that utilized the cluster concept. John Goodlad's work on leagues and clusters for school improvement is the basis for the program model. Research on school change (Rand, 1978; Network, Inc., 1982) contributed to program development. The school climate concept is based on the work of Brookover, Lezotte, and Rutter, and Eugene Howard and Robert Fox, among others. The effective schools cluster approach incorporates effective schools literature (Edmonds, Brookover, Lezotte, Good), and effective teaching literature (Hunter, Stallings, Bloom). The futuristics research synthesis indentifies Toffler (*The Third Wave*), Yankelovich (*New Rules*), Papert (*Mindstorms*), and Naisbitt (*Megatrends*) as major contributors.

Procedures. Initially, principals and teacher leaders attend a cluster meeting of their choosing, acquaint themselves with the concept and process, and make a decision regarding permanent membership. Once a school team joins a cluster, the team attends eight meetings per year. Meetings are concerned with review of related research, strengthening skills, sharing activities, and development of school projects related to the unifying cluster concept. All clusters follow a similar eight-step improvement process: collection of base line data; formation of a management team; awareness assessment; priority setting; establishment of task forces; implementation; and collection of benchmark data.

A management team is formed, responsible for obtaining and coordinating improvement activities in the school. Using instruments and procedures designed for that purpose, the team gathers base line data which provide a measurement of quality indicators, including achievement data and data related to various symptoms of alienation. Activities designed to inform parents, pupils, and staff about the rationale of the project also occur early in the process. An assessment, or "mini-audit," is then conducted to generate information which can be used for priority-setting. At a workshop involving parents, staff, and student leaders, from one to five priorities are defined from among several possible quality determinants (that is, characteristics of the school which affect its quality positively or negatively).

Once priorities are set, a school improvement task force is formed for each priority. Each task force is responsible for planning, administering, and evaluating school improvement activities related to its priority. Task forces identify *what* is to be done, *who* is to do it, and by *when*. The management team monitors progress and provides support and assistance to task force members. At the end of each year's work, benchmark data are collected to measure and report on the impact of the improvements. The school improvement process is a long-range effort, spanning 2 to 5 years.

There are some procedural differences according to the cluster topic. The *school climate* improvement process begins with the formation of a climate improvement management team, responsible for planning and coordinating improvement activities in the school. Using instruments designed for that purpose, the team gathers baseline data on symptoms of a positive climate and pupil achievement levels.

Effective schools clusters utilize a comprehensive instrument, *Indicators of Quality Schools* (developed by the Colorado SEA) to assess school characteristics and programs across three dimensions: student outcomes, school leadership, and the accountability/accreditation/planning process. All 12 categories assessed are research-based. A separate instrument, *District Level Indicators Supporting Quality Schools*, is utilized as a district self-assessment.

Futuristic clusters use a validated instrument, *The Schools*

of the Eighties and Nineties—A Priority Search, to help schools define an "image of the future" and develop a vision statement as the focus for school improvement activities. Strategic planning for effective schools/futuristics clusters follows the eight-step improvement process.

Assistance and resources available. A "hub" consisting of an SEA school improvement specialist, a cooperating university representative, and a BOCES-based facilitator provides administrative services, technical assistance and resources to member schools as they plan, implement and evaluate improvement projects. A program consultant visits each member school approximately once a year. Four statewide meetings per year are scheduled for all 10 clusters, to share improvement activities.

Materials include research synthesis packages (with instruments) for each cluster, climate filmstrips, and articles related to cluster concepts.

As a result of new Colorado legislation, cluster participants can receive college credit (three credits per year) for school improvement efforts.

CONDITIONS REQUIRED FOR EFFECTIVE IMPLEMENTATION

Entry. The program requires state department leadership and commitment to provide staff and resources to clusters. Cluster membership is limited to no more than 12 schools, so that maximum cohesiveness can be accomplished. Participating schools are located in close proximity, and must commit themselves for a minimum of 3 years.

Operations. The essential conditions are: receptivity of local districts, school administration and staff to a system-wide improvement process; willingness to engage in self-assessment and to commit time/energy to planning efforts; leadership of the school principal; and thorough understanding of the research base underlying each cluster concept.

FEATURES OF SPECIAL INTEREST

The cluster/league concept allows for active involvement of school leaders, staff, and parents in selecting an improvement focus and learning a school-based planning process It also provides a systematic, large-scale method for the SEA to influence and support state-wide school improvement activities.

Research synthesis packages translate research into practice, and enable participants to understand the basis for cluster activities. Comprehensive, validated assessment instruments are tailored to each cluster, and provide relevant data to help schools determine priorities and develop action plans.

Task forces become a vehicle for professional growth. "This is not just a committee; they study, learn, and apply. They are action groups."

The Colorado program's school-level procedures have been borrowed and adapted in many other effective schools programs.

COSTS

Start-up. Initial time costs include attendance at one cluster meeting for 2 to 5 persons to determine interest in participation (one-half day), completion of base line data instruments (2 days), and a series of awareness-raising meetings (6 hours) following initiation in cluster groups.

Operations. Assessment costs vary, depending on the method used. If written instruments are used, a 2 to 3 hour faculty meeting is needed to complete survey forms. Two to three person-days are needed to summarize and report results. Priority-setting occurs at a half-day staff workshop; districts agree to close schools for this meeting once every 3 years.

Management team time commitment is approximately 800 person-hours per year.

Principals/school representatives who are cluster members attend eight cluster meetings per year (4 to 5 hours each), and four state-wide half-day meetings. Districts are responsible for providing substitutes, travel costs, and registration fees (which total $120).

Time needed for staff development activities varies, depending upon projects to be implemented. District/school materials costs also vary. Funds from existing budgets can be reallocated, thus reducing new costs. All schools in the project have been able to participate without requesting additional funding from their district offices.

PROGRAM IMPACT

Developer estimate. Schools that follow the eight-step improvement process have seen marked improvement in student achievement and quality descriptors (attendance, truancy decline, discipline, student attitudes, staff morale). Case studies are being collected by the department.

Other evaluative data. School management teams collect benchmark data at the end of each improvement cycle. Achievement scores, attendance and discipline data are included in post assessment evaluations.

MATERIALS AVAILABLE

School Climate Research Synthesis Package, 1980-84. ($7.50)
Effective Schools Research Synthesis Package, 1982. ($7.50)
Futuristic Research Synthesis Package, 1984. ($5.00)

CONTACT FOR FURTHER INFORMATION

Dr. Arthur Ellis, Director, Field Services Unit, School Improvement, Colorado Department of Education, 303 West Colfax Avenue, Denver, CO 80204. (303) 573-3266.
Roy Brubacher, Director, Office of Field Services, Colorado Department of Education. (303) 573-3315.
Dr. Clifford Brookhart, Coordinator of School Administration, Bureau of Educational Research, University of Denver, Marjorie Reed Hall, #114, Denver, CO 80210. (303) 871-2525.

EFFECTIVE SCHOOLS PROGRAM

7

Mid-Continent Regional Educational Laboratory (McREL)
2600 So. Parker Road
Bldg. 5, Suite 353
Aurora, CO 80014

4719 Belleview
Kansas City, MO 64112

SPONSOR: Mid-Continent Regional Educational Laboratory

OBJECTIVE/NEEDS ADDRESSED

The general objective of the Effective Schools Program is to foster the development of building-level, self-sustained improvement efforts guided by site-based leadership teams, relying on the research on instructionally effective schools. The basic concern is for increased student achievement, in elementary, junior high/middle and high school settings.

Intermediate goals are implementation of effective school factors; changes in participants (knowledge of effective schools concepts) and change in the culture of the school building and the classroom (for example, higher expectations for students, increased staff cohesiveness and collaboration, and more equitable delivery of instruction); and increased student motivation, engaged learning time, and success rates.

USERS OF THE PROGRAM

The program is currently used in 31 districts, most of which are middle-sized suburban; a few rural districts and some large cities are included. There is a wide range of socioeconomic status, mostly middle to low. Minority percentages ranges from 5 to 55 percent, mostly black, with some Hispanic. The program is used in about 80 elementary schools, 25 junior high/middle schools, and 50 high schools. Users who may be contacted for further information are:

Dr. Mary Garcia, Assistant Superintendent, Blue Valley School District, Stanley, KS (913) 681-2866

Dr. Robert Black, Superintendent, District 53, Liberty Public Schools. Liberty, MO (816) 781-4541

Greg Netzer, Principal, Piper Junior High School, Piper, KS (913) 721-2100

PROGRAM OVERVIEW

Background. The program was developed by Larry Hutchins and Susan Everson, drawing on the literature on effective schools (Edmonds), effective teaching (Evertson, Glasser, Gordon, Berliner, Johns Hopkins, LRDC, SWRL) and the change process (Goodlad, Fullan, Joyce, Miles, and Rand studies for example). After pilot work in 1980-81, the program was implemented in 1982.

Procedures. There are nine basic steps. The program begins with orientation, provided to board, central office, and building staff. A leadership team (principal and four to eight key teachers) is created for each building involved (up to ten in a district). Initial planning and training for leadership teams cover roles, activities, and time lines. Four workshops, a month apart, cover the content of teaching and instruction, building-level leadership and organization, and the curriculum/assessment relationship, as well as the "process" topics of facilitation and change, and planning.

A peer-oriented coaching process begins immediately: pairs of teachers ("trust pairs") observe each other using instruments, and meet in small support groups. School-wide diagnostic instruments include Describing Your School's Characteristics (DYSC), measuring perceptions of effective-schools factors; an equity assessment; and an Academic Efficiency Index applied to the building as a whole. The data are fed back in graphic and item-analyzed form to the leadership team and/or building faculty. Priorities among the effective schools factors are set, and interventions are selected for each priority. It takes about 6 months to accomplish these activities.

A general action planning and implementation process ensues, lasting for one to five years.

Assistance and resources available. Materials include the instruments, a manual, videotapes for training, and "folios" with research information. During start-up, one assister provides a half-day of initial orientation, then 4 training days, spaced about 6 weeks apart. There are 4 added half-days of administrative training (on instructional leadership). During later operations, 2 added days of follow-up assistance (coaching and support for the leadership team) are provided. Ideally, the McREL assistance role is as a "total change agent," maintaining a sustained, appropriately varied relationship with the school and district.

McREL is currently training turnkey trainers for the program in intermediate units such as Boards of Cooperative Educational Services in Nebraska and Iowa.

CONDITIONS REQUIRED FOR EFFECTIVE IMPLEMENTATION

Entry. Expressed interest is required from district and building(s), along with attendance at the orientation meeting. Willingness to make a long-term commitment to improvement is expected. Initial training time (4 spaced days) and leadership team meetings between training sessions are essential, along with willingness to begin the support group process.

Operations. The Effective School Program sustained long-term commitment.

FEATURES OF SPECIAL INTEREST

The thoroughness of the approach is noteworthy, as is the active use of the change process and staff development literature, the attention to curriculum and assessment, and the range of resource materials available. Attention is paid to *both* classroom and school-building level factors. The instru-

mentation is linked to effective schools factors. The peer coaching process, carried out before building-wide planning, probably increases trust and concrete classroom focus, thus teacher ownership.

COSTS

Start-up. Time costs during the first 6 months are 4 training days for faculty and 2 added days for administrators, with associated dollar costs for released time. At least an equivalent number of meetings is typical for leadership teams. Released time is needed for "trust pair" classroom observation twice monthly, along with meetings of support groups. The dollar costs (contract with McREL) for assistance, materials and instrumentation average $1,500-$2,000 *per team,* assuming multiple teams per district (up to ten).

Operations. Time is required for follow-up days for the leadership team, plus ongoing implementation work. Assistance costs are included in above total.

PROGRAM IMPACT

Developer estimate. As per program materials on "desired impact" (Everson et al., 1984), the program is said to bring about changes in board policy, instructional leadership practices, and staff instruction, along with increased student achievement. These results depend on long-term commitment from the board, district, and buildings. There is often some initial anxiety about the support groups/coaching process, which usually disappears.

Other evaluative data. Internal evaluations (based on document analysis, interviews and observations, cognitive tests of understanding of the research literature, annual readministration of the DYSC survey, the Academic Efficiency Index, and standardized test scores in eight different sites) came to several conclusions. Teacher and administrator responses on the DYSC became more similar, suggesting increased communication. There was increased understanding of effective schools concepts, especially those focusing on teaching and learning. Teachers used new motivation and discipline techniques. Student engaged time on task was greater.

A school district case study (Everson et al., 1984) of the first year of use found district-level policy and procedural changes (for example, mission statement, curriculum articulation and review, inservice methods) and building-level changes (more principal presence in classrooms, more support for teachers), as well as classroom changes (continued peer observation, varied instructional modes, increased student engagement rates), and a trend toward increased student achievement.

MATERIALS AVAILABLE

McREL's School Improvement Program (portion of brochure). (no charge)

Hutchins, C.L., B.J. Guzzetti, and A.M. Riley. March 1984. Quality Schools: Review of the Research on Effective Schools and Effective Teaching. ($2.50)

Guzzetti, B.J. 1983. Report on Instruments for Measuring School Effectiveness. ($5.00)

Everson, S.T., S.J. Scollay, B. Vizbara-Kessler, and M. Garcia. Application of the research on instructionally effective schools and classrooms: a study of an effective schools project at district, school, teacher and student level. Paper read at AERA, New Orleans, 1984. ($4.00)

Folio Series (research reviews, practical tips, added references): Beginning the School Year, Expectations, Time Management, Motivation, Discipline, Instruction. 1984. ($3.40 for set of 6, any combination)

Many materials are also available to districts and schools as part of a McREL contract, including: Videotapes (for orientation, later training; available 1984-85); Guidelines for use of instruments; Describing Your School's Characteristics; Academic Efficiency Index; Equity instrument; Training manual; Planning guide.

CONTACT FOR FURTHER INFORMATION

Robert Ewy, McREL, 2600 So. Parker Road, Building 5, Suite 353, Aurora, CO 80014. (303) 337-0990.

Susan Everson, McREL, 4719 Belleview, Kansas City, MO 64112. (816) 756-2401.

CONNECTICUT SCHOOL EFFECTIVENESS PROGRAM

8

Connecticut State Education Department
Box 2219
Hartford, CT 06115

SPONSOR: Connecticut State Education Department

OBJECTIVES/NEEDS ADDRESSED

Improvement of student achievement in basic skills is the primary goal of the Connecticut School Effectiveness Program. The process advocates a voluntary, school-based approach that helps a school examine itself introspectively in relation to school effectiveness characteristics, and develop/implement an action plan for improvement. There is an emphasis on building capacity at the school level for team members to carry out the process and implement program activities on their own. The program is now focusing on institutional areas such as time on task and effective teaching strategies.

USERS OF THE PROGRAM

The program is in current use in 16 Connecticut districts including rural, suburban and several large/fringe city areas. Socioeconomic status ranges from unskilled to middle class. The percentage of black and Hispanic students ranges from 0 to 100 percent, depending upon districts involved. The program is used in 33 elementary schools, a middle school, and a junior high school.

Users who may be contacted for further information are:

Ed Litke, Principal, Maple Street School, Rockville, CT (203) 875-5680

John Basset, Principal, New London Junior High School, New London, CT (203) 447-3056

Dr. DeNorris Crosby, Principal, James Hillhouse High School, New Haven, CT (203) 787-8486

Bryan McCarthy, Principal, Rockville High School, Rockville, CT (203) 872-7391

PROGRAM OVERVIEW

Background. The program was developed by a planning team from the Connecticut State Department of Education under the direction of Dr. William J. Gauthier, Jr. The team did an extensive review of the literature on school effectiveness (Edmonds, Lezotte, Brookover, Rutter), teacher effectiveness (Hunter, Brophy, Good, Rosenshine), and change theory, prior to conceptualization of the program format.

Procedures. Program facilitators discuss objectives/entry requirements at the district level. Presentations to interested principals/staff members follow. Once a commitment is made by principal and faculty by vote or consensus, data collection begins.

In elementary and junior high schools, a 3-day assessment process utilizes: (a) the 67-item Connecticut School Effectiveness Interview, administered to all classroom teachers; (b) the Connecticut School Effectiveness Questionnaire, administered to all staff; (c) the Achievement Profile, which presents student achievement scores and illustrates similarities and differences among students along social class dimensions; and (d) archival data (handbooks, written records).

In high schools, a more detailed questionnaire with added climate/equity information is administered to a sample of the total staff. A student questionnaire, developed by the State Student Council, is completed by secondary students. A School Effectiveness Summary Report relates data gathered from all sources.

The principal organizes a Planning Team, responsible for analyzing data and developing an Action Plan. On a 3-day retreat, *elementary* planning teams complete initial written plans; *high school* committees develop a list of concerns based on data which are later included in the Action Plan. Information is shared with the total staff, and priority areas are established. Task forces, guided by the Planning Committee, develop objectives and activities in priority areas. The State Department provides resource personnel to assist with plan implementation.

Assessment and action planning are usually completed in the first year. It takes 2 years to see effective implementation of plan activities.

Assistance and resources available. State Education Agency (SEA) facilitators maintain weekly contact with schools, and spend approximately 1 to 2 days per month at each site. They monitor program activities and train planning committees to carry out the process on their own. Resources/training needed to implement plan activities are provided by SEA staff. Schools hire additional consultants at their own cost. The program sponsors a principals' network and coordinates a yearly 2-day school effectiveness conference.

CONDITIONS REQUIRED FOR EFFECTIVE IMPLEMENTATION

Entry. District-level commitment and willingness to offer support and resources are essential. The superintendent must agree to provide necessary fiscal support during plan implementation. Districts must agree that after the 2 to 3 year period they will "go it alone," without facilitator assistance. At the building level, the principal and a significant number of staff must make a commitment to support the program.

Operations. The principal and staff must have long-term commitment to the process and implementation of program/plan activities. Districts must agree to let the SEA carry out program evaluation.

FEATURES OF SPECIAL INTEREST

The program has continued emphasis on developing internal capacity for school improvement at the building level. Well-designed, reliable assessment instruments both validate the constructs and provide specific information in all areas for planning improvement activities. Intensive development efforts enabled program staff to develop valid and well-grounded procedures, instruments and training materials.

COSTS

Start-up. Time costs for school staffs include 1 to 2 hours for completion of assessments, and 2 hours for subsequent analysis during staff meetings.

Operations. Time costs for the planning retreat total 3 days. Districts provide substitutes for teacher participants. Actual costs for retreats range from $0 upwards, depending upon choice of facilities/arrangements. Training and meeting times for local teams average 1 day per month. Consultant costs (other than state personnel) are paid by the local district. The SEA now covers all data processing costs.

PROGRAM IMPACT

Developer estimate. The program has resulted in increased staff development activities in many schools and significant changes in organization of instruction (e.g., grouping, remediation programs). The School Effectiveness Program has spread in many districts, beginning with one school and mushrooming to district-wide efforts. Building of collegiality and communication within shools has improved as teachers become involved in the decision-making process.

Other evaluative data. A state-wide evaluation has recently been completed, using both descriptive data analysis and case study approaches. There is considerable evidence that schools have altered the school effectiveness characteristics that were the focus of their action plans. The overall mean achievement of schools in reading and mathematics has significantly improved, although there has been considerable variance from school to school and grade to grade. The gap between the proportion of low income students and other students scoring at the 30th percentile or below on standardized tests has narrowed in almost all schools over time. Moreover, in some schools at certain grade levels and in certain content areas, the number of low income students below the 25th percentile has been completely eliminated. Finally, in almost all schools, the proportion of low income students scoring below grade level has decreased; consequently, the proportion of these students scoring above grade level has increased.

MATERIALS AVAILABLE

Connecticut School Effectiveness Interview 1982 (Elementary)
Connecticut School Effectiveness Questionnaire 1983 (Elementary)
Secondary School Staff Questionnaire (Forms 1 & 2) 1983
Secondary School Student Questionnaire (Forms 1 & 2) 1983
Sample Data Display (Elementary)
Sample Data Display (Secondary)
(Mailing costs for the complete package of materials: $2.50)
Gauthier, W.J., Jr. 1983. *Instructionally Effective Schools: A Model and a Process,* Connecticut State Department of Education.

CONTACT FOR FURTHER INFORMATION

Dr. William J. Gauthier, Jr., Chief, Bureau of School and Program Development, Connecticut Department of Education, Box 2219, Hartford, CT 06115. (203) 566-5079.

URBAN ACADEMY PROGRAM

New Haven Board of Education
Instructional Services Center
21 Wooster Place
New Haven, CT 06511

SPONSOR: New Haven Board of Education

OBJECTIVES/NEEDS ADDRESSED

The Urban Academy is the New Haven Board of Education's mechanism for promoting school improvement through principal training and school-based planning. This commitment represents a collaborative effort with Yale University Child Study Center and the University of Connecticut, for design and development of the Urban Academy program. The academy's goals are to help principals become effective instructional leaders, to improve classroom instruction, and to move all New Haven schools to an instructionally effective status.

USERS OF THE PROGRAM

The program is in current use in 27 elementary and 6 middle schools within the New Haven district. Socioeconomic status levels range from blue-collar/unskilled (75 percent) to middle class (25 percent). Minority percentages range from 20 to 90 percent, mostly black and Hispanic, with a small percentage of Oriental students.

Users who may be contacted for further information are:

Edward Joyner, Principal, Jackie Robinson Middle School, New Haven, CT (203) 787-8770

Joseph LaVorgna, Principal, Roberto Clemente Middle School, New Haven, CT (203) 787-8885

Richard DeNardis, Principal, Isadore Wexler Elementary School, New Haven, CT (203) 787-8690

PROGRAM OVERVIEW

Background. The Urban Academy was developed in cooperation with Yale University Child Study Center and the University of Connecticut. Effective schools research (Edmonds), child development theories (Comer), and a human relations focus contributed to the development of the Urban Academy model. The program was initiated in 1981.

Procedures. Through a developmental two-tier training programs, the Urban Academy supports the role of the principal as an instructional leader, assists school teams in developing improvement plans, and offers training in group interaction and team leadership. Activities include a heavy emphasis on process and incorporate a strong human relations component.

Tier I programs include activities which support the role of the principal as the instructional leader in the building. They include workshops, informational seminars, and professional and personal interaction with area, state-wide and nationally-recognized educational and child development specialists.

Tier I also includes development of a building level improvement plan which is primarily geared to academic needs as defined by standardized testing. A School Planning Team (SPT) including the principal and teacher and parent representatives cooperatively develops the Instructional Plan for Improvement (IPI) which is required of all New Haven schools. The plan incorporates the school's academic goals for the following year in relation to the overall goals established for the New Haven system. The plan offers a frame of reference for administrative objectives, teacher objectives and staff development issues. School teams meet for 2 days prior to the opening of school to formulate the plan and prepare it for presentation to the entire faculty.

While Tier I is provided for all New Haven principals, participation in *Tier II* is determined by principal/staff agreement. The focus in Tier II is on educational team leadership. A School Planning and Management Team (SPMT) serves as the school's advisory committee for all instructional matters. Tier II activities include training for principals/teams in the Effective Teaching/Conference program led by a national consultant, and establishment and training of a school Mental Health team. Mental Health team members (teachers, social worker, psychologist, guidance counselor) meet weekly to discuss school issues with a focus on prevention rather than intervention. The SPMT conducts school assessments which form the basis for continued plan development to meet identified needs. Throughout Tiers I and II, Urban Academy staff work closely with district office personnel to coordinate instructional programs and planning efforts.

Assistance and resources available. All Tier I and II activities are coordinated by the Urban Academy. The Program Director and liaison visit each school regularly to offer follow-up and support assistance. The Urban Academy sponsors training for Mental Health teams and effective teaching workshops. Workshop materials and comprehensive planning packets are available for Tier I and II participants. The Urban Academy is limited to New Haven schools, but support staff is willing to supply advice regarding adaptation.

CONDITIONS REQUIRED FOR EFFECTIVE IMPLEMENTATION

Entry. Principals and school teams may opt for participation in Tier II after Tier I activities. Schools remain in Tier I from 1 to 3 years. Schools that decide to move to Tier II continue in Tier activities simultaneously.

Operations. Tier II schools must be committed to the team management concept and agree to plan and work coop-

eratively to assess school needs and develop plans for improvement.

FEATURES OF SPECIAL INTEREST

Urban Academy activities focus on the role of the principal and strengthen his/her capacity to work cooperatively with school planning teams. The summer institute provides for systemwide effort before the school year begins, enabling teams to plan for the coming year. Special training for mental health teams emphasizes a prevention approach to solving potential school problems.

COSTS

Start-up. Planning teams agree to attend a 2-day summer institute before school opens. The program provides stipends for participants.

Operations. Tier I and II principals attend monthly 3-hour training/workshop sessions. Tier II principals and SPMT members agree to meet monthly during after-school sessions. Principals and teacher representatives attend four to six all-day effective teaching workshops during Tier II. The program covers all substitute costs. There are no dollar costs to schools participating in the Urban Academy.

PROGRAM IMPACT

Developer estimate. Participant response has been positive. The process has enabled schools to institute successful activities such as staff breakfasts and student-run radio programs. Tier II schools showed substantial growth in student achievement on standardized tests. The mental health training component has been praised by staff members who indicate that weekly sessions provide needed support for teachers and mental health personnel.

Other evaluative data. Impact is measured by comparisons of test scores, analysis of midyear reports, surveys, and visits to schools by program staff. Review of questionnaire responses revealed that teachers saw the school teams as a change vehicle, and felt that this method of school-based planning was making schools more effective. Each individual workshop held by the Urban Academy staff uses an evaluation form.

MATERIALS AVAILABLE

Descriptive information: Program goals and objectives. (no charge)

Comprehensive Planning Information Packet. (no charge)

CONTACT FOR FURTHER INFORMATION

Marc Palmieri, Director, Urban Academy Program, New Haven Board of Education, Instructional Services Center, 21 Wooster Place, New Haven, CT 06511. (203) 787-8441.

CHICAGO EFFECTIVE SCHOOLS PROJECT (CESP)

10

Chicago Public Schools
Office of Equal Educational Opportunity
1819 W. Pershing Road
East Center 6
Chicago, IL 60609

SPONSOR: Chicago Public Schools

OBJECTIVES/NEEDS ADDRESSED

The Chicago Effective Schools Project was designed to remedy the impact of racial isolation on minority student achievement, through implementation of instructional and organizational strategies to ensure that all students acquire basic skills. The program seeks to help schools improve in six major factor areas: leadership; instructional emphasis; school climate; staff development; assessment of student progress; and parental involvement and support. A primary goal is to achieve school/classroom improvement through a process of needs identification and local action planning. CESP was recommended as one of the educational components of the Chicago Student Desegregation Plan.

USERS OF THE PROGRAM

The program is in current use in 18 urban, inner-city Chicago districts. The socioeconomic status level is unskilled/blue-collar with a majorty (95 percent) of low income families. Minority percentages are from 75 to 100 percent, mostly black and/or Hispanic. The program is now in 100 schools (K-6 and K-8), and 7 educational/vocational guidance centers (grades 7-9).

Users who may be contacted for further information are:

Dr. Robert A. Saddler, Superintendent, District 7, Chicago, IL (312) 826-3600

Dr. Rudolph Salmeron, Superintendent, District 8, Chicago, IL (312) 254-1571

Dr. William Taylor, Principal, Carter G. Woodson Elementary School, District 14, Chicago, IL (312) 548-6410

Sherye Garmony, Principal, John M. Gregory Elementary School, District 10, Chicago, IL (312) 638-0016

PROGRAM OVERVIEW

Background. The Chicago Effective Schools Project was initially implemented in 1981, within the context of the Educational Components of the Chicago Student Desegregation Plan. The plan sought to apply effective schools research (Edmonds, Brookover, Lezotte) in instituting a program to alleviate the educational disadvantages that accrue to minority students in racially isolated schools. CESP was developed by the Chicago Office of Equal Educational Opportunity (OEEO), now responsible for managing overall implementation, monitoring and evaluation of program activities. The 45 schools that participated in phase one (1981-82), were joined by 62 additional sites in 1983-84. Criteria were locally and centrally established to identify those minority and low socioeconomic status schools with lowest achievement patterns for inclusion in CESP.

Procedures. Orientation sessions at the district/school level serve to familiarize staff with program goals, assessment procedures, and roles and responsibilities of team members. Local planning committees conduct a comprehensive assessment designed to identify needs in six factor areas. Both CESP instruments and materials developed at the school level are utilized. Staff of the Department of Research and Evaluation assist teams with assessment, analysis of data and presentation of findings to school staff.

Once priorities are identified, each team develops a 3-year action plan outlining long range goals and objectives, measurable improvement activities, and initiation/completion dates. Training, staffing, delivery of resources and technical assistance are coordinated by the principal in cooperation with the teacher facilitator and instructional aide, both school-based, and district and CESP administrative staff.

Needs assessment and planning activities in 1983-84 schools were completed in 2 months (November-December 1983). Implementation began in January 1984, and will continue throughout the 3-year cycle.

Assistance and resources available. The Chicago Effective Schools Project provides both personnel and fiscal support. The program assigns a full-time teacher facilitator and an instructional aide to each school. Free from classroom duties, their major responsibilities include program coordination, instructional support and inservice training. CESP recruited 21 parent development teachers to organize parent involvement/training programs. Parent development teachers are in schools 1 full day each week.

All central office units are committed to support CESP, and offer technical assistance and training in their areas of specialization (Research and Evaluation; Pupil Personnel Services; Curriculum Development; Special Education). Substantial financial resources are available to support implementation efforts. Allocations vary, according to school size and assistance requested in local plans. The program sponsors a series of school effectiveness conferences to promote sharing among CESP schools.

The program is limited to Chicago schools, but support staff is willing to supply advice regarding replication elsewhere.

CONDITIONS REQUIRED FOR EFFECTIVE IMPLEMENTATION

Entry. District office support and the school's commitment to the collaborative planning process are essential.

Operations. CESP's success depends on sustained school commitment to the process, and active staff involvement in planning and implementation activities.

FEATURES OF SPECIAL INTEREST

Program activities focus on examination and improvement of staff attitudes and instructional practices, as well as the provision of financial and personnel resources. The program combines a "bottom-up, top-down" approach, which expands local decision-making power. Discretionary planning at the school level has resulted in recommendations which altered district/central office policies and procedures.

Personnel resources (teacher facilitator, instructional aide, parent development teacher) and financial incentives provide much support for effective implementation of plan activities. The parent involvement effort is a well developed, integrated component.

COSTS

Start-up. Initial time costs during the assessment period total approximately 30 hours per school, for completion of survey instruments, data analysis and review of results.

Operations. Time costs for planning team members vary. Meetings are held regularly before/after school hours, and are arranged at local sites. Attendance at inservice sessions is voluntary. Stipends are available for participants.

PROGRAM IMPACT

Developer estimate. Assessments of target schools reveal that positive and substantive changes have occurred in student behavior, staff attitudes, instructional leadership and cooperative planning. All CESP schools have incorporated extended day activities for a selected number of students. After-school sessions (1 to 1½ hours) provide opportunities for review and reinforcement of instructional activities.

Based upon enthusiastic responses of participants and positive impact, schools not included in the target sample have made requests to join CESP.

Other evaluative data. A CESP study prepared by the Department of Research and Evaluation (1982) reports that pupils in CESP schools showed greater improvement in mean gains on the Iowa Test of Basic Skills than did pupils in comparison schools. Evaluative data also indicate that by May 1982 many CESP schools ranked above schools which had previously surpassed them in city-wide rankings in May 1981. Evaluation results of fiscal year 1983 indicate that the achievement of CESP students has improved for most grade levels. A significant number of the CESP students have exhibited achievement that is equal to or greater than national norms.

MATERIALS AVAILABLE

Chicago Effective Schools Project: A Description and Review of 1981-82 Implementation Efforts. Office of Equal Educational Opportunity, Chicago Public Schools, August 1982. (no charge)

Chicago Effective Schools Project: A Report of Evaluation Results. Department of Research and Evaluation, Chicago Public Schools, 1982. (no charge)

Parent Development Plan for the Chicago Effective Schools Project.
Office of Equal Educational Opportunity, Chicago Public Schools, May 1984. (no charge)

CONTACT FOR FURTHER INFORMATION

Mrs. Sylvia Brandon, Director, Chicago Effective Schools Project; Chicago Public Schools, Office of Equal Educational Opportunity, 1819 W. Pershing Road, East Center 6, Chicago, IL 60609. (312) 890-7771.

Dr. Ruth Love, Superintendent, Chicago Public Schools. (312) 280-3800.

Dr. Nelvia M. Brady, Associate Superintendent, Office of Equal Educational Opportunity, Chicago Public Schools. (312) 890-7790.

SCHOOL IMPROVEMENT MODEL (SIM)

Iowa State University
College of Education
E 005 Quadrangle
Ames, IA 50011

SPONSOR: Iowa State University

OBJECTIVES/NEEDS ADDRESSED

The School Improvement Model aims to improve teacher and administrative performance with an ultimate goal of increased student achievement. The system/outcomes-based model enables schools to design teacher and administrative performance evaluation systems to meet local needs. The program endeavors to make four linkages: (1) an appraisal of teacher performance related to student learning; (2) an appraisal of administrators' behaviors and relationships with colleagues, teachers, and students; (3) an assessment of student achievement related to mastery of local curriculum objectives, and (4) staff development interventions.

A major objective is development of methods and materials for use in assisting other schools interested in initiating such a process. A secondary focus is to share performance criteria, identified by schools, with colleges and universities responsible for preparing teachers and administrators.

USERS OF THE PROGRAM

The program is in current use in five school districts (one in Iowa, four in Minnesota) and involves 17 elementary, 8 junior high/middle and 7 high schools. The selection of diverse areas, both in terms of location (rural, city, suburban) and socioeconomic status (a wide range is represented) was intended to demonstrate the broad applicability of SIM. Minority percentages range from 2 to 28 percent, mostly black, with some Hispanic, Native American and Asian students. The program has been replicated in eight other states (PA, NY, TX, MS, CA, MI, IL, MO).

Users who may be contacted for further information are:

Dr. Ray Smyth, Assistant Superintendent, Edina Public Schools, Edina, MN (612) 944-3613

Harold Overman, Superintendent, Spirit Lake Community Schools, Spirit Lake, IA (712) 336-2820

Dave Darnell, Superintendent, Lewis Central Community Schools, Council Bluffs-Omaha, IA (712) 366-2531

PROGRAM OVERVIEW

Background. The Northwest Area Foundation/School Improvement Model Project conceived in 1979 was supported by the Northwest Area Foundation and funded from June 1980 to June 1984. School effectiveness literature (Edmonds, Rosenshine, Rutter, and others) was utilized in developing the process. Performance improvement strategies and materials developed at Iowa State's University Research Institute formed the basis for the concepts and procedures to be field-tested. The Iowa School Improvement Model is being funded by the individual districts; this consortium began its work in July 1983.

Procedures. A school steering committee (10 to 20 members, including principal, teacher representatives, parents, and secondary students) is selected to guide development of the model. Initially a framework for performance evaluation is developed by addressing a series of key questions: *Why* evaluate performance? *What* are the performance criteria for teachers and administrators who will be evaluated? *How* will the performance evaluation systems be operationalized in our school? Each steering committee, assisted by field coordinators and program staff, develops handbooks related to the teacher and administrator evaluation systems. Along with philosophical premises, the handbook contains performance evaluation forms and criteria, and specific procedures (methods, time lines) for operationalizing the system. Committees receive technical assistance and informational/research materials to carry out these tasks.

A "test and try" pilot of the systems occurs in year two. Schools test the usability of evaluation materials/methods. The program conducts a series of training sessions for evaluators prior to the test and try phase. Principals/district office staff conduct evaluations and use the instruments to assess effectiveness of the systems. Following the test and try stage, the steering committee revises instruments and evaluation methods, with staff input. Upon its approval by the total staff, the evaluation system is recommended for adoption. The third project year focuses on staff development activities. Schools select topics for inservice, based upon individual needs and recommendations from field coordinators and program staff.

The total process in the Northwest Area Foundation (planning, piloting, revising and implementing a performance evaluation system, creating a district-specific staff development program, and measuring student outcomes) spans a 4-year period. The Iowa SIM projects have a 3-year time window because these schools are not measuring student outcomes.

Assistance and resources available. Local field coordinators provide support and technical assistance, visiting each school weekly, and attending all steering committee meetings. SIM staff members develop and conduct training sessions for field coordinators, steering committees and evaluators. The program provides computerized reports of performance evaluation data, and works with schools to design and conduct relevant staff development programs.

Many articles, performance evaluation descriptions, and

informational materials are available. A locally developed climate inventory is part of each school's evaluation process.

Any school system throughout the country may contract with SIM for consultant services.

CONDITIONS REQUIRED FOR EFFECTIVE IMPLEMENTATION

Entry. SIM must have prior district level approval and support, and broad-based representation during school planning and implementation activities. An initial commitment to self examination and willingness to participate in evaluation procedures are required of teachers and administrators.

Operations. Essential requirements are continued leadership from principal and steering committee members and active staff involvement. The principal's willingness to accept responsibility for implementation of the performance evaluation system is a primary prerequisite.

FEATURES OF SPECIAL INTEREST

"SIM is unique in that each school organization has its own inside task force to control and direct the planning for the creation of the four linkages within its organization." Evaluation criteria/materials/procedures are developed by schools, creating local ownership of each personalized system. Training activities are also "tailor-made," to support the evaluation model.

The program offers many informative printed materials to assist schools in implementation (articles, occasional papers, sample evaluation materials, project newsletters).

COSTS

Start-up. Districts assign someone already on the administrative staff to be a field coordinator to provide technical assistance and monitor program implementation. Total time costs during the first year are about 12 days.

Operations. Time costs for training activities total 5 full days for evaluators (principals and district representatives), and 6 to 8 days per year for field coordinators. Staff training is conducted during scheduled inservice days.

Steering committees meet for six to eight full-day sessions during the first year of the project. Meetings in the second and third years are less frequent. Districts are responsible for substitute costs. Implementation of evaluation procedures and policies (observations, conferencing, supervisory logs) requires a substantial time commitment from principals. Total time costs for field coordinators are 10 days in the second year, and 20 in the third.

Contracts with individual districts for SIM services vary depending upon assistance requested. Costs can range from $30,000 to $50,000 for a 3-year contract.

PROGRAM IMPACT

Developer estimate. All SIM schools have developed handbooks that include educational philosophies, performance criteria for administrators and teachers, and evaluation instruments. Schools have incorporated SIM activities into their evaluation systems, and have indicated that they plan to continue using the process. The program has resulted in improved staff communication, personal/professional growth through relevant inservice work, and a greater emphasis on instructional leadership by SIM principals.

Other evaluative data. A complete program evaluation of the NWAF/SIM 4-year project is currently being compiled and will include an analysis of 4th grade reading and mathematics (NRT and CRT) test results and 8th grade mathematics (NRT and CRT) test results. The preliminary reports were scheduled to be available by October 31, 1984.

MATERIALS AVAILABLE

Evaluating and Improving Teacher Performance (Training Workbook) 1984.

SIM: A Matrix of Teacher Performance Areas and Criteria Selected by the School Organizations in the SIM Project for Use During the 1981-82 School Year, 1981.

SIM Newsletters (6 issues).

Occasional papers:

1981: School Improvement Model Teacher Performance Criteria with Response Modes and Standards (81-2); SIM Selected References: Research on Effective Teaching Behaviors (81-3).

1982: Teacher Performance Evaluation: Practical Application of Research (82-1); Administrator Evaluation Tailored to Your District or Independent School (82-2); The School Improvement Model: Tailoring a Teacher and Administrator Performance Evaluation System to Meet the Needs of the School Organization (82-3); Research Synthesis on Effective School Leadership (82-4); The Neglected Key to Teacher Performance Evaluation (82-5); The SIM Model: A Scenario for Operational Status (82-6).

1983: Competent Evaluators of Teaching: Their Knowledge, Skills, Attitudes (83-1); SIM Building Administrators' Performance Criteria with Responses and Standards: A Summative Evaluation Report (83-3); SIM Achievement Testing in the School Improvement Model (83-3); Performance Criteria for the Evaluation of School Principals and Headmasters (83-4). (All materials above are included in a *SIM Packet* which is available for $15.00)

1984: Clinical Manual for Teacher Performance Evaluation (84-1) ($50.00); Compendium of Performance Improvement Commitments (manual) ($50.00); CATE/S (Computer-Assisted Teacher Evaluation/Supervision), usable on Apple IIe, IBM-PC, available from National Computer Systems (NCS), Owatonna, MN 55060 (In press, cost to be determined); The School Improvement Model: a Final Report. Northwest Area Foundation, St. Paul, MN (in press).

Articles:

Stow, S., and J. Sweeney. Developing a Teacher Performance Evaluation System. *Educational Leadership*, April 1981.

Manatt, R., K. Palmer, and E. Hidelbaugh. Evaluating Teacher Performance with Improved Rating Scales. *NASSP Bulletin*, September 1976.

CONTACT FOR FURTHER INFORMATION:

Dr. Richard Manatt and Dr. Shirley Stow, Co-Directors, School Improvement Model, Iowa State University, College of Education, E 005 Quadrangle, Ames, IA 50011. (515) 294-5521.

KENTUCKY SCHOOL EFFECTIVENESS PROGRAM

12

Kentucky Department of Education
1810 Capital Plaza Tower
Frankfort, KY 40601

SPONSOR: Kentucky Department of Education

OBJECTIVES/NEEDS ADDRESSED

The Kentucky School Effectiveness Program is directed toward improving local schools through a district-wide assessment and planning process. The focus is on four effective school components which have been identified for use in Kentucky schools: Instructional Leadership, Instructional Planning, Instructional Time, and Evaluation and Rewards. Intermediate goals are to improve student achievement as shown in increased Comprehensive Test of Basic Skill (CTBS) scores, by improving schooling practices, and to implement effective school components in Kentucky schools.

USERS OF THE PROGRAM

The program is in use in 21 Kentucky districts: 19 rural areas, 2 cities. The socioeconomic status mix is mainly blue-collar/unskilled (90 percent), with some middle class (10 percent). The percentage of minority students is approximately 5 percent black. Of the 100 schools involved, 75 are elementary, 5 junior high/middle and 20 high schools.

Users who may be contacted for further information are:

Nancy Stout, Instructional Supervisor, Spencer County Schools, Taylorsville, KY (502) 477-2948

John W. Smith, Superintendent, Jackson County Schools, McKee, KY (606) 287-7181

PROGRAM OVERVIEW

Background. The program was developed in 1982 by Dr. Donald Hunter, who was then on staff at the Kentucky Department of Education's Office of Instruction. Dr. Hunter is now Assistant Superintendent of Covington Independent School System, one of the participating districts. The model draws on effective schools research (Edmonds) and the work of Eugene Howard at the Colorado Department of Education.

Out of a total of 180 districts, 25 were targeted for the program based on several factors, including CTBS scores (lowest ranking in the state). Superintendents had the option of participating; 21 agreed to enter following attendance at an orientation session where program goals were discussed.

Procedures. A team from the program office (four to six consultants) spends from 2 to 4 weeks in each school during the needs assessment phase. Teacher/student/parent surveys and in-depth interviews with teachers, instructional supervisors, principals and district superintendents are conducted to assess needs, for each of the four effective school components. Time-on-task audits and classroom observations provide additional data. A preliminary report listing strengths and concerns in each component is presented first to individual schools, and then compiled in a district report which describes composite data from all schools.

A district committee (district/school/parent representatives) reviews the report, responds to the findings, shares results with local staffs, and then develops a school effectiveness plan to address priority needs in all four areas. The plan includes objectives, activities, time-lines and required resources. The program provides consultant support and financial resources to assist districts in implementing plan activities.

Assessment, planning and initial implementation efforts can be completed in one school year.

Assistance and resources available. Program staff members conduct the needs assessment (2 to 4 weeks in each school), assist in plan development (2 full days per school), and monitor plan activities during 2 to 3 yearly visits to schools/districts. The aim is to help districts begin the process and then to reduce assistance, encouraging self-implementation.

Materials include teacher/parent/student surveys; interviews; Kentucky School Effectiveness brochures; engaged time analysis forms; and assessment and planning worksheets. Inservice training is offered in analysis and use of CTBS scores, climate improvement, test sophistication, curriculum development, and additional topics requested. Each district receives financial support to support implementation of improvement activities. The program sponsors a yearly statewide school effectiveness conference to promote sharing of effective practices and program successes.

The program is currently limited to Kentucky schools, but support staff is willing to supply advice regarding adaptation elsewhere.

CONDITIONS REQUIRED FOR EFFECTIVE IMPLEMENTATION

Entry. The program requires district support, willingness to go through the evaluation process, and participation in shared decision-making.

Operations. The district provides released time for teachers on the planning team (2 days). Team members must be willing to meet additional hours to compile the plan and prepare for presentations to local staffs. Some committee members should accept implementation responsibilities and agree to complete assigned tasks (monitoring of plan activities, summer curriculum-writing).

FEATURES OF SPECIAL INTEREST

The program focuses at the district level, encouraging a

system-wide school improvement effort. The needs assessment process is comprehensive and utilizes a variety of data gathering instruments. Consultants and resource personnel are generalists and can offer inservice and on-site support in many areas. Chapter II grants enable the program to offer implementation funds to districts.

COSTS

Start-up. Time costs per teacher involved during the needs assessment phase include interviews and surveys (20 to 30 minutes), and classroom observations (30 minutes). Teachers from a random sample are asked to meet with consultants prior to observations.

Operations. Time costs for planning teams average 2 full days for initial plan development and one to two additional meetings after school hours. The district is responsible for providing substitutes for teacher members. Additional time is required of team members who accept monitoring responsibilities during plan implementation (hours vary). Inservice activities are scheduled on staff development days, during school hours, if requested. There are no additional dollar costs to Kentucky districts participating in the school effectiveness program.

PROGRAM IMPACT

Developer estimate. Positive impact was seen in increased district/local communication; improved staff attitudes; greater community involvement; more relevant inservice activities; and more efficient use of curriculum guides and instructional materials. The process has developed the district's capacity to systematically identify and address instructional needs.

Other evaluative data. Districts report an increase in CTBS scores following implementation of improvement activities.

MATERIALS AVAILABLE

Kentucky School Effectiveness brochure
Summary of improvement activities that have been implemented
Teacher surveys
Student surveys
Parent surveys
Interview guidelines
Engaged time analysis form
Assessment and planning worksheets
Tips on writing an effective plan
Tips for inservice topics
(Single copies of all materials listed are available at no charge)

CONTACT FOR FURTHER INFORMATION

Kay Anne Wilborn, Director, Division of School Improvement, Kentucky Department of Education, 1810 Capital Plaza Tower, Office of Instruction, Frankfort, KY 40601. (502) 564-2264.

Stan Glenn, Educational Staff Consultant, 2349 Green River Road, Henderson, KY 42420. (502) 826-9902.

John Wright, Educational Staff Consultant, Route #12—Box 148, Paducah, KY 42001. (502) 554-0499 (Residence), (502) 444-8360 (Office).

PROGRAM DEVELOPMENT EVALUATION (PDE)

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Center for Social Organization of Schools
Johns Hopkins University
3505 N. Charles Street
Baltimore, MD 21218

SPONSOR: Center for Social Organization of Schools

OBJECTIVES/NEEDS ADDRESSED

Program Development Evaluation (PDE) is a school improvement method that schools and school districts can use to develop, implement and evaluate innovations aimed at increasing their effectiveness. The method is general enough that it can be used to address any goal, but schools use it most often to improve academic achievement, attendance, and school climate, and to reduce school disruption and drop-out.

USERS OF THE PROGRAM

PDE is in current use in five school districts (one in Maryland, four in South Carolina). The socioeconomic status range is wide. Minority percentages run from nearly none to 100 percent black. Four South Carolina schools (two junior high, two senior high) and two Maryland schools (both junior high) have adopted the approach.

Users who may be contacted for further information are:

Pat Morris, Teacher, Calverton Junior High School, Baltimore, MD (301) 523-6944

Dr. Alice Black, Principal, Pimlico Junior High School, Baltimore, MD (301) 396-0806

Fran Abee, Program Director, School Enhancement Program, South Carolina Association of School Administrators, Columbia, SC (803) 798-8380

Barbara Dilligard, Deputy Superintendent, Personnel, Charleston County School District, Charleston, SC (803) 724-7714

PROGRAM OVERVIEW

Background. PDE was developed and piloted as part of a 3-year national initiative funded by the Office for Juvenile Justice and Delinquency Prevention in 1980 to reduce juvenile delinquency by altering educational policies and practices. Sixty-nine schools in 17 projects participated in the School Action Effectiveness Study (Gottfredson, 1982; Gottfredson, Gottfredson and Cook, 1983). The participating schools and school districts were located in primarily urban areas in 11 cities and 2 U.S. territories (Los Angeles; Chicago; Kalamazoo, MI; New York City; Charleston, SC; Houston; Hayward, WI; Miami; Plymouth, MI; Sewell, NJ; Milwaukee; St. Paul; Virgin Islands; Puerto Rico). During this 3-year period, a school climate assessment battery, the Effective Schools Battery (ESB) (Gottfredson, in press) was developed and piloted, and the PDE method was fine-tuned.

The PDE method has its roots in organizational psychology (French and Bell), action research (Lewin), and educational evaluation (Cook and Campbell). The method also calls for extensive use of research and evaluation findings from fields related to the goal selected by the organization, as well as the application of relevant behavioral science theory to the organization's problems.

Procedures. Any school or school district can use the Program Development Evaluation method. A planning team (administrators, teachers, support staff) oversees the PDE process and improvement efforts. Program consultants train teams in the PDE method and in the administration and use of the Effective School Battery (ESB), a series of scientifically designed survey instruments which assess 34 specific aspects of school climate, and describe teacher and student characteristics.

The school improvement team administers the ESB to teachers and students, and studies the results along with information from school records. It identifies problems, and generates ideas about their causes. Consultants provide summaries of research findings relevant to the goals and objectives selected by the team. The team uses this information to select interventions aimed at the causes of the problems. A management plan is developed for each program component, estabishing implementation standards, anticipating obstacles to meeting those standards, identifying changes in the environment that must occur in order for the plan to move forward, and specifying who must do what by when to accomplish the school improvements. Team members also create a management information system to keep informed about the status of each program component: logs and activity records are summarized and periodically reviewed to evaluate improvement efforts. Modifications to the program plan are made as needed to strengthen it.

Assistance and resources available. Program consultants are responsible for providing relevant research findings, collecting and interpreting local data, training teams in the PDE method and the use of the ES Battery, providing evaluation assistance, and preparing technical progress reports. Consultants may also function as PDE facilitators. They maintain records of the school change plans.

Schools receive on-site assistance approximately twice a month. A manual summarizing PDE is provided at the initial orientation, and research syntheses are made available as needed.

The PDE process can be utilized by any school system interested in district/school-wide improvement. Program consultants train district personnel to implement the PDE method, or work directly with the implementing organization as facilitators. Various collaborative arrangements with program staff are possible.

CONDITIONS REQUIRED FOR EFFECTIVE IMPLEMENTATION

Entry. Needed conditions include: district approval and interest; principal's support; school system commitment to redefine staff roles and responsibilities to provide time for PDE activities; willingness of administration/staff to participate in self assessment; and openness to change.

Operations. The conditions required are commitment to the planning process by team members and school administration; willingness of team members to meet monthly and carry out assignments; and willingness of the school administration to redefine staff member roles to allow them to carry out their new responsibilities.

FEATURES OF SPECIAL INTEREST

The PDE method places more emphasis than many other school improvement models on the management of change. The method is designed to help organizations remain "on task" in the organization development efforts. The force-field analysis component, a diagnostic method, helps organizations anticipate obstacles and create strategies to avoid these obstacles. Implementation standards are developed which clearly stipulate expected quantity and quality of program services, and which facilitate evaluation and modification. The responsibilities of the program implementers are also clearly defined.

The program depends on theory in the design phase, encouraging team members to consider the causes of problems in terms of available social science theory and research, as well as data from the ESB. Development of a clear statement of causes facilitates program development targeting the problem-generating conditions identified.

The method relies heavily on information from several sources: needs assessment surveys and school archives for problem identification; previous school improvement efforts and research for selecting interventions; a management information system for monitoring and modifying the program; and evaluation studies for major program modifications.

COSTS

Start-up. Initial time costs include 2 to 5 days for team orientation/PDE training; full staff orientation (usually at faculty meetings); and needs assessment costs (one-half hour to complete teacher survey, 2 hours to complete student survey, 1 hour required to train staff in administration of student survey).

Operations. Teams meet one full day each month. Schools/districts are responsible for arranging teacher coverage for orientation sessions/team meetings. A substantial time commitment is required of team members. Ideally, one period per day should be reserved for new duties that are defined as a result of the PDE process.

Staff inservice totals 2 to 5 days per year. It is the team's responsibility to arrange for the release of teachers. Existing staff development time may be used, or teachers may receive credit for attending sessions scheduled during non-working hours.

Dollar costs for PDE consultants/researchers are funded by districts and federal/state grants. The process can be implemented with existing district resources.

PROGRAM IMPACT

Developer estimate. PDE has not been evaluated separately from the programs which have been developed and implemented using the PDE method; thus program effects cannot be separated from the effects of using PDE. In general, the use of PDE has helped to promote strong management, and a sense of collaboration among workers in schools. Schools have developed strong, more plausible programs, and have implemented them with a high degree of rigor and fidelity to the plan.

Other evaluative data. Results from an interim evaluation of the Baltimore City project show that schools using PDE increased on the following ESB dimensions during the first year of program implementation: professional development, interaction with students, classroom orderliness, nonauthoritarian attitudes, safety, morale, planning and innovative action by faculty and staff, parent involvement, student influence, and teacher-administrator cooperation. Results from student surveys have not yet been tabulated.

MATERIALS AVAILABLE

Gottfredson, G.D. In press. Effective School Battery User's manual. Odessa, FL: Psychological Assessment Resources, Inc. ($12.90 for photocopy; published price to be set)

Gottfredson, G.D. A theory-ridden approach to program evaluation: a method for stimulating researcher-implementer collaboration. *American Psychologist,* In press. (no charge)

Gottfredson, G.D. ed. *The School Action Effectiveness Study: First Interim Report.* (Report No. 325). The Johns Hopkins University: Center for Social Organization of Schools. (212 pp., $3.00)

Gottfredson, G.D., D.C. Gottfredson, and M.S. Cook. eds. *The School Action Effectiveness Study: Second Interim Report.* (Report No. 342). The Johns Hopkins University: Center for Social Organization of Schools. (142 pp., $3.00)

Gottfredson, G.D., D.K. Ogawa, D.E. Rickert, Jr., and D.C. Gottfredson. *School Climate Assessment.* The Johns Hopkins University: Center for Social Organization of Schools. 1983. (no charge)

Gottfredson, G.D., D. Rickert, Jr., D.C. Gottfredson, and N. Advani. *Standards for Program Development Evaluation Plans.* (Report No. 341). The John Hopkins University: Center for Social Organization of Schools. 1983. (no charge)

CONTACT FOR FURTHER INFORMATION

Denise C. Gottfredson, Associate Research Scientist, or Gary D. Gottfredson, Research Scientist, Center for Social Organization of Schools, Johns Hopkins University, 3505 N. Charles Street, Baltimore, MD 21218. (301) 338-7570.

SCHOOL IMPROVEMENT THROUGH INSTRUCTIONAL IMPROVEMENT (SITIP)

14

Maryland State Department of Education (MSDE)
200 W. Baltimore Street
Baltimore, MD 21202

SPONSOR: Maryland State Department of Education

OBJECTIVES/NEEDS ADDRESSED

The purpose of SITIP is to assist schools in implementing one or more instructional processes proven to be effective in increasing student achievement. Four instructional models, identified through research reviews and state studies, were selected for replication in local districts: Active Teaching; Mastery Learning; Student Team Learning; and Teaching Variables. The program aims to facilitate implementation of local plans to institute one or more of the models by providing awareness conferences, training, implementation funds and technical assistance.

USERS OF THE PROGRAM

SITIP models are in use in 180 Maryland schools (117 elementary, 61 secondary, and 2 schools with kindergarten through twelfth grade). Twenty-four school systems (county units), mostly rural, are represented. Also included are some large city and suburban districts. Socioeconomic status ranges widely, and includes a 20 to 25 percent black population.

Users who may be contacted for further information are:

Active Teaching Model: James R. Dyer, Supervisor of Instruction, Caroline County, MD (301) 479-1460

Mastery Learning Model: Gwendolyn Roney, Mastery Learning Facilitator, Baltimore City, MD (301) 396-1544

Student Team Learning Model: John Walker, Supervisor of Instruction, or William Storage, Director of Curriculum and Instruction K-12, Queen Anne's County, MD (301) 758-2403

Teaching Variables Model: Jack C. Morgan, Supervisor of Secondary Education, Somerset County, MD (301) 651-1485

PROGRAM OVERVIEW

Background. SITIP was designed by the Maryland State Department of Education in 1980. The initiative supported previous MSDE programs (Project Basic, Maryland Professional Development Academy), and was preceded by extensive research and development efforts. The models selected have proven successful in increasing student achievement and are research based: Active Teaching (Good, Grouws), Mastery Learning (Bloom, Block), Student Learning Teams (Slavin), and Teaching Variables (Research for Better Schools). School effectiveness/planned change research contributed to the development of the SITIP model.

A preparation stage devoted to open systems planning, and exploration of models for inclusion in SITIP preceded the implementation phase.

Procedures. SITIP is a multi-year, interactive process. Interested Local Education Agencies (LEAs) send cross-hierarchical teams (district staff, principals, teachers) to a SITIP Awareness Conference where each model is presented by its developer. The design and nature of LEA team involvement is described. LEAs develop proposals to implement one or more of the models.

The MSDE assists LEAs in implementation by sponsoring training sessions, conducting on-site workshops, providing support to local coordinators and arranging networking activities. A 3-day follow-up training session in each model is offered to local teams. Dissemination is encouraged as implementation activities are shared within and among LEAs. The MSDE assists central office staff in planning and conducting turnkey training throughout the districts. Program impact is assessed regularly. Data on local concerns and implementation progress are collected and used in planning program modifications.

Assistance and resources available. SITIP sponsors the initial Awareness Conference led by program developers and 3-day follow training sessions in each model. Two MSDE technical assisters (TAs) are assigned to each model to coordinate training, facilitate implementation and dissemination, and offer technical assistance to LEAs. (TAs visit each participating LEA approximately 2 days per year). The MSDE gives each LEA a $10,000 incentive grant to support implementation efforts. An assistant superintendents' retreat (1982) and instructional leadership conferences sponsored by the MSDE provide opportunities to present information on instruction and planned change, review SITIP implementation results, and plan for future activities.

CONDITIONS REQUIRED FOR EFFECTIVE IMPLEMENTATION

Entry. The program requires LEA commitment to attend the awareness conference, meet with local schools, and develop the implementation proposal. LEAs agree to 3-year implementation assistance from MSDE. Technical assistance ends following the 3-year period, and LEAs are expected to have institutionalized the process by that time.

Operations. LEAs agree to send teams to 3-day training in the instructional model selected. Teams are responsible for the implementation and dissemination of the program model throughout the district.

FEATURES OF SPECIAL INTEREST

Awareness sessions enables teams to learn about each

model from developers and make informed selections based on local needs. Follow-up training and technical assistance from MSDE facilitate effective implementation and dissemination. The 3-year cycle provides time for LEAs to develop local capacity for implementation. The involvement of cross-hierarchical teams allows for increased communication and share decision-making at all levels.

COSTS

Start-up. Time costs include team attendance at awareness conference (1 day), follow-up training (3 days), and participation in networking meetings at local schools (time varies).

Operations. LEAs are responsible for substitutes for teachers on local teams who attend awareness/training conferences. MSDE funds provided to schools can be used for substitute costs as well as implementation needs. There are no dollar costs to LEAs or participating schools for implementation of instructional models.

Replication of the SITIP design requires funds for national consultants/program developers, staff positions to coordinate implementation of each model and provide technical assistance, and funds for incentive grants to LEAs for materials and training needs.

PROGRAM IMPACT

Developer estimate. All 24 LEAs in the state have voluntarily implemented one or more instructional models, and most have provided matching funds to continue program activities following a 3-year period. Teachers, administrators and district office personnel have become knowledgeable in school/classroom effectiveness and planned change research. Teachers have responded positively to training activities, and have learned to use the models successfully.

Other evaluative data. A 1984 evaluation of SITIP by Research for Better Schools reports that a major area of impact at the school/district level was continued sharing among educators. Technical assistance resulted in improved communication between LEAs and MSDE; widespread understanding of a common knowledge base within LEAs; and changes in student attitudes, increased achievement, and mastery and retention of skills. The models which had the greatest impact on student achievement, according to the RBS study, were Mastery Learning, Active Teaching and Student Learning Teams. Application of the principles of planned change was reported to be crucial to successful implementation activities.

MATERIALS AVAILABLE

Roberts, J. M. E., and J. L. Kenney. *Instructional Improvement in Maryland: Impact on Educators and Students* (executive summary). Research for Better Schools, January 1984. ($6.00)

Roberts, J. M. E., J. Kenney, J. Buttram, and B. Wolf. *Instructional Improvement in Maryland: A Study of Research in Practice* (executive summary). Research for Better Schools, October 1982. ($4.00)

Roberts, J. M. E., and S. C. Smith. *Instructional Improvement: A System-wide Approach.* Research for Better Schools, March 1982. ($22.00)

Roberts, J. M. E., and J. L. Kenney. *Institutionalization of Statewide Instructional Improvement* (executive summary). Research for Better Schools 1984. ($5.00)

(order from Research for Better Schools, 444 North Third Street, Philadelphia, PA 19123)

CONTACT FOR FURTHER INFORMATION

Dr. Richard Petre, SITIP, Maryland State Department of Education, 200 West Baltimore Street, Baltimore, MD 21202. (301) 659-2385.

SCHOOL IMPROVEMENT PROGRAM

Detroit Public Schools
5057 Woodward Avenue
Detroit, MI 48202

SPONSOR: Detroit Public Schools

OBJECTIVES/NEEDS ADDRESSED

The primary goal of the School Improvement Project (SIP) is to improve pupil achievement through collaborative planning efforts at local schools. Activities focus on implementing research findings to develop a process model for school-based planning. The program is emphasizing four major priority areas for the 1984-85 school year: student achievement, school climate, guidance and counseling, and school-community relations.

USERS OF THE PROGRAM

The program is in current use in all 277 Detroit schools (all urban). The socioeconomic status range is from unskilled/blue-collar to middle class. The minority population is approximately 85 percent black. Participating schools include 197 elementary schools, 58 junior high/middle schools, and 22 high schools.

Users who may be contacted for further information are:

John Hoye, Principal, Tappan Elementary, Area B, Detroit, MI (313) 834-3222
Mary G. Sturkey, Principal, Edison Elementary, Area C, Detroit, MI (313) 835-7186
William Washington, Principal, Cleveland, Middle School, Area E, Detroit, MI (313) 893-8551
Dr. John F. Jones, Principal, Joy Middle School, Area F, Detroit, MI (313) 925-2830
Dr. Walter Jenkins, Principal, Cooley High School, Area G, Detroit, MI (313) 835-3200
Dr. Dennis Stavros, Evaluator, Evaluation & Testing Department, Schools Center Annex, Detroit, MI (313) 494-2251
Dr. JoAnne Moore, Evaluator, Evaluation & Testing Department, Schools Center Annex, Detroit, MI (313) 494-2251

PROGRAM OVERVIEW

Background. The program grew out of three earlier school improvement efforts: the Superintendent's Achievement Program, which was initiated during the early 1970's; a six-school project administered in cooperation with the Institute for Research and Teaching at Michigan State University, funded by NIE (1980); and the Detroit High School Improvement Project, sponsored by the Ford Foundation (1981). The research base for the current program includes effective schools literature (Edmonds, Brookover, Lezotte), and effective teaching research (Hunter, Stallings). The present School Improvement Program began in 1983.

Procedures. The model includes six basic steps: formation of a local school improvement team; a needs assessment; selection of solution strategies; development of a school improvement plan; and monitoring/evaluation of plan activities.

Needs assessment processes include administration of formal instruments (e.g., modified Connecticut School Effectiveness questionnaire; Michigan K-12 Program Standards of Quality questionnaire), use of informal assessments designed by local schools, and review of prior year school evaluation reports and current profiles.

Teams identify areas in need of improvement, review and analyze relevant ideas and research related to their areas of concern, select appropriate intervention strategies, and develop a written improvement plan. Plans must include school profile information, achievement test data, a philosophy statement, priority areas and objectives, implementation schedules for attainment of objectives, monitoring responsibilities, and procedures for evaluating activities. An inservice training program to meet identified needs is designed by the team, and incorporated within the plan.

The improvement cycle is a 2-year process.

Assistance and resources available. A city-wide coordinator and seven Achievement Specialists offer support and training for administrators and staff. Each Achievement Specialist is responsible for 30 to 35 schools within a geographic area. Specialists visit each school approximately 5 to 8 days per year.

Summaries of effective schools research, checklists for plan development, and a packet of forms to be included in the written plan are available. A comprehensive sourcebook (includes research summaries and directory of program services and resources) developed by an earlier school improvement program, is utilized as a resource by all Detroit schools.

The program is limited to Detroit schools, but the support staff is willing to supply advice regarding replication.

CONDITIONS REQUIRED FOR EFFECTIVE IMPLEMENTATION

Entry. Key conditions are commitments of area superintendents to support the process and provide resources. Principals must be willing to engage in collaborative planning.

Operations. The process requires willingness of staff to devote time/energy to planning team efforts, along with completion of monitoring/evaluation responsibilities to support plan implementation.

FEATURES OF SPECIAL INTEREST

The program is implemented at the local level, and focuses on the school as the main unit of change. The Detroit

General Superintendent has given SIP full district support, and views the program as a major vehicle for district-wide improvement. Curriculum review/development and staff training are integrated with school improvement efforts.

COSTS

Start-up. Time costs for initial orientation/training total approximately 2 hours for principals and approximately 2 hours for staff. There are no additional dollar costs to a school for initiating the process.

Operations. Completion of need assessment surveys involves 2 hours of staff time. Planning teams meet before/after school, or during lunchtime. Some released time and/or stipends for team participation are provided. Inservice training for administration and school teams is conducted both centrally and at the school level.

Achievement Specialists are funded through the local district. Funds from each school's budget can be utilized for materials and consultants needed to implement plan objectives.

PROGRAM IMPACT

Developer estimate. The program has resulted in increased staff involvement/participation, improved academic achievement and school climate, and better utilization of existing personnel/resources.

Other evaluative data. Impact is measured by on-site visits by Achievement Specialists and review of evaluation components included in each school's plan. Achievement data are used to determine what impact effective schools methodologies have had on overall increased pupil performance. Approximately 90 percent of SIP schools have accomplished their objectives as stated in their individual plans. A complete evaluation design is in progress.

MATERIALS AVAILABLE

Description: Detroit School Improvement Program. (no charge for 1 copy)

Detroit School Improvement Plan (packet of planning materials). (no charge for 1 copy)

Summary of Effective School and Effective Teaching Research. (no charge for copy)

Research Summaries: A Directory of Programs, Services, and Resources. Detroit Public School System, Wayne County Intermediate School District, Michigan Department of Education, Michigan State University College of Education, March 1983. ($7.00)

CONTACT FOR FURTHER INFORMATION

Mrs. Gail Nordmoe, Director, School Improvement Program, Detroit Public Schools, Rm. 944 Schools Center, 5057 Woodward Avenue, Detroit, MI 48202. (313) 494-1100.

MICHIGAN SCHOOL IMPROVEMENT PROJECT (M-SIP)

16

Michigan Department of Education
Box 30008
Lansing, MI 48908

SPONSOR: Michigan Department of Education

OBJECTIVES/NEEDS ADDRESSED

The Michigan School Improvement Project is a structured process through which school staffs can identify and address their most-needed areas of improvement. The process encourages shared planning and decision-making at the school level, and is based on the belief that school staff members play a key role in determining the nature and direction of improvement efforts. Related objectives are improvement of student achievement, organizational climate, instructional effectiveness, and delivery of services to students.

USERS OF THE PROGRAM

Sixty schools (35 elementary, 12 junior high/middle schools, 10 high schools, and 3 schools with kindergarten through twelfth grade) representing 20 Michigan districts are now participating. Districts range from rural to urban, with many socioeconomic status levels represented. Minority percentages (including black, Hispanic and Native American) range from less than 1 percent to 65 percent.

Users who may be contacted for further information are:

Ron Sergeant, Director, Instructional Programs, Kalamazoo Valley Intermediate School District, MI (616) 381-4620

Clarence Brock, Director of Curriculum, Saint Clair Intermediate School District, Port Huron, MI (313) 364-8940

Tim Haynes, Principal, Central Intermediate School, Port Huron, MI (313) 987-4670

PROGRAM OVERVIEW

Background. The Michigan School Improvement Project model draws on the participative processes of the Taylor model for school improvement developed in the Taylor, Michigan, School District, as well as effective schools research and organizational climate assessment methods developed at Wayne State University. The eight Michigan school effectiveness principles grew out of an ETS/Technical Assistance Center report commissioned in 1981, which examined literature on school effects and organizational change. The program became operational in 1982.

Procedures. This is a five-step model which is usually completed in 1 year. The time frame differs depending upon the number of activities initiated and when work is begun in the school year. The program begins with Step I, *Familiarization,* when the principal and the staff of a school come to understand the key features of M-SIP and make a commitment to the process. In Step II, *Assessment and Goal Setting,* a School Improvement Survey (SIS) is used to enable administrators/teachers to assess where their school *is now, could be,* and *should be* in four areas: Administrator/Teacher Relations, Teamwork and Communications, Instructional Effectiveness, and School Effectiveness. Discussion of the composite school profile follows, with identification of major needs. Step III, *Planning and Decision Making,* involves the preparation of improvement plans and staff review. In Step IV, *Implementation and Monitoring,* the activities/events/tasks in the plan are carried out, and team process reports/updates are given to staff. Step V, *Documentation and Evaluation* of improvement efforts, is the final phase.

Assistance and resources available. M-SIP trains facilitators in local and intermediate school districts to assist building teams. Program coordinators maintain regular contact with facilitators throughout the state and provide support and ongoing assistance. The state department developed a set of eight Michigan School Improvement Series booklets. Each booklet defines one school effectiveness variable and includes ideas for application in a school setting. (Titles include *Teacher Expectations, Parental Involvement, Time On Task, Principal Expectations, Classroom Management, Positive Feedback and Reinforcement, Tutoring, Question and Answer Recitation*). A comprehensive manual for training local facilitators is also available *(Guidelines for Building Assistance Teams).*

CONDITIONS REQUIRED FOR EFFECTIVE IMPLEMENTATION

Entry. It is important for schools to fully understand the process, purposes, and assumptions of M-SIP prior to deciding to join. A positive vote by the school staff, of 75 percent or higher, is necessary for M-SIP to be implemented in that school.

Operations. The project requires ongoing participation and commitment of the planning team and total staff throughout the five-step process.

FEATURES OF SPECIAL INTEREST

The emphasis is on teaching staff a process so that they can implement it themselves. The program is based on extensive research and careful development. Accompanying materials support the activities and offer specific "how to" information for both facilitators and classroom teachers.

COSTS

Start-up. Time costs include approximately 1 hour for initial presentation and 2 hours or more for data gathering and analysis of the school profile. One to three days per year are required for planning team work (district or principal may provide released time). There is no dollar cost to implement the initial M-SIP *process* in Michigan schools using existing resources.

Operations. Time costs include hours set by planning

teams to develop plans and share with staff. Dollar costs of operations vary depending upon the plan components (consultants, materials) required in each school.

PROGRAM IMPACT

Developer estimate. M-SIP has increased staff communication and decision-making. "Teachers feel that they have a say—that their problems are being solved since they identified these through a democratic process." Changes in attitude result as staff members see how colleagues feel about the school and discuss their perceptions. Creation of discipline policies, development of programs to raise student motivation, and curriculum improvements are identified as examples of impact.

Other evaluative data. At the local level, evaluation plans range from measures of student achievement via the Michigan Educational Assessment Program (Saginaw district) to teacher perceptions of students' behavioral changes (Port Huron district). At the state level, evaluation questions are answered annually: (1) How effective was the training of facilitators? (2) How effective were the services of the Michigan Department of Education? (3) What changes have occurred in school buildings and in staffs? For example, how were the skills and knowledge learned in the process used to increase time on task, classroom management and/or positive feedback? (4) How were the attitudes changed to support positive administrator-teacher relations? (5) What changes occurred in students? Was there increased student achievement, better attendance and/or fewer discipline problems?

On most of these questions, data are not currently available. However, local facilitators, as of December 1983, felt their training and the follow-up support provided them were helpful; building assistance teams had functioned well, but emphasized the need for added support by local administrators.

MATERIALS AVAILABLE

M-SIP Description

Guidelines for Building Assistance Teams: Implementation Manual

Planned Change in the Educational Environment (ETS Study)

M-SIP Series (8 Booklets: Teacher Expectations, Parental Involvement, Time On Task, Principal Expectations, Classroom Management, Positive Feedback and Reinforcement, Tutoring, Question and Answer Recitation)

(At present there is no charge for *single* copies of materials listed)

CONTACT FOR FURTHER INFORMATION

Dr. David Donovan, Assistant Superintendent, Technical Assistance and Evaluation, Michigan Department of Education, Box 30008, Lansing, MI 48908. (517) 373-8374.

KELLOGG/FIPSE INSERVICE TRAINING PROGRAMS FOR ELEMENTARY PRINCIPALS

17

Middle Cities Education Association
Michigan State University
517 Erickson Hall
East Lansing, MI 48824

SPONSOR: Middle Cities Education Association

OBJECTIVES/NEEDS ADDRESSED

The Kellogg/FIPSE in service programs both aim to improve school effectiveness by strengthening the instructional capacity of elementary principals. The focus is on helping principals become knowledgeable in their understanding of four areas: effective schools research, effective teaching strategies, evaluation and support of instruction, and implementation of a school improvement model.

USERS OF THE PROGRAM

The Kellogg program is in use in 13 moderate (30,000) to small (3,000) urban districts (10 public, 3 parochial), in and around the Battle Creek area. Thirty elementary principals participated in 1983-84; an additional 60 will receive Kellogg sponsored training in 1984-85/85-86.

The FIPSE program in use in 17 moderate to small urban districts (all public) involved 80 principals in 1983-84 and 1984-85.

The socioeconomic status mix in the districts represented is 10 to 90 percent minority, mainly black, with some Hispanic, Mexican American, and Asian.

The program is currently limited to districts in the Michigan Middle Cities Education Association, and to those around the Battle Creek area, but the program staff is willing to provide advice on adaptation for use elsewhere.

Users who may be contacted for further information are:

Dr. Jack Mawdsley, Superintendent, Battle Creek School District, MI (616) 965-9500

Lorraine Kaminski, Curriculum Director, Traverse City Area Public Schools, MI (616) 941-2027

Richard Goodwin, Director of Elementary Instruction, Pontiac School District, MI (313) 857-8123

Larry Green, Principal, Hunt Elementary School, Jackson, MI (517) 789-8144

PROGRAM OVERVIEW

Background. Twenty-four middle-sized urban districts are members of the Middle Cities Education Association. Formed in 1973 as a non-profit corporation affiliated with Michigan State University, the association aims to build individual capacity of participating districts through structured self-help programs and cooperative activities. The 24 member districts account for over 250,000 students.

The association was able to develop an inservice training program for elementary principals with grants from two sources: the Kellogg Foundation and the U.S. Department of Education's Fund for the Improvement of Post-Secondary Education (FIPSE). The grants were designed to improve educational leadership in member schools.

Procedures. Superintendents were introduced to program goals and informed of district responsibilities at a conference attended by district staff and Middle Cities coordinators. They were asked to select schools based upon potential for improvement, expressed interest, and willingness of principal/staff.

Both programs have similar operating procedures, although the length and content of training activities may vary. An orientation session (2 to 3 days), provides principals with information regarding their role in the program, an overview of effective schools/effective teaching research, and information on the use of school improvement assessment instruments. Principals administer the Connecticut School Effectiveness Questionnaire, and return data for scoring. At a workshop session, coded data for each building are exchanged, and all principals are asked to write an analysis of the needs assessment data for another unidentified principal's school.

Each principal then uses the assessment data and written analysis to develop a personal, individualized action plan to improve his or her instructional leadership ability. This plan is to be implemented before the beginning of the next school year. In that (next) year, extensive school-based planning at the building level addresses needs in the seven correlates assessed with the Connecticut instrument.

An additional program component includes extensive training (five sessions) in effective teaching strategies, with built-in practice and coaching activities. Participants practice the acquired skills in their own schools with the assistance of a trained coach. In the future, these sessions will also be open to teachers from participating schools. In 1984-85, plans call for the addition of a "teacher leader" to join with the principal to assist the building staff in development of school improvement plans and to provide staff support for implementing concepts of effective teaching. Conferencing skills and a focus on developing specific strategies for improving each of the effective school correlates will be emphasized in 1984-85.

Assistance and resources available. Middle Cities staff provide and coordinate training activities. Each principal in the Kellogg-sponsored program receives approximately 100 hours of training throughout the 3-year grant period. Thirty "group one principals" who received 60 hours of inservice in 1983-84 will receive an additional 60 hours during

1984-85, and 50 hours in 1985-86. Thirty "group two principals" will have 60 hours of training in 1984-85 and 50 hours in 1985-86. The third group of 30 will have 60 hours in the final project year (1985-86).

The FIPSE-sponsored program provided four training sessions (32 hours) for two groups of 40 principals in 1983-84. An additional 32 hours were to be provided in 1984-85.

The programs also offer assistance to principals in analyzing needs assessment results and exploring potential improvement activities. A task force from the division of Research and Evaluation of the Middle Cities Education Association provides support to participants in the Middle Cities programs. A resource notebook and list of effective school resources are available.

CONDITIONS REQUIRED FOR EFFECTIVE IMPLEMENTATION

Entry. A commitment by each district to support program activities is essential. Superintendents agree to attend an initial training session with principals, offer continued district-level support for implementation of program activities, and cover costs for travel, lodging and meals.

Operations. The programs require sustained commitment to "apply and practice" skills learned during training. Willingness of principals to participate in coaching activities and guide school teams in developing improvement plans is necessary for effective program implementation.

FEATURES OF SPECIAL INTEREST

Both programs aim to apply a combination of effective schools/effective teaching research in the development of training activities to meet school needs. There is a central focus on the key role of the principal, emphasizing what is needed to get active building-level work under way. Through the cooperative efforts of Middle Cities members and Michigan State University staff, there is increased capacity for implementation of project activities. The built-in coaching component, which has proved to be one of the most successful aspects of training, provides opportunities for participants to practice and apply new skills. The Association's efforts create a viable support system for principals involved in school improvement.

COSTS

Start-up. Time costs for a district include meetings with program directors (one-half day), selection of participating principals, and attendance at one introductory training session with principals (1 day).

Operations. Districts are responsible for all travel, lodging and meal costs. When schools require "substitute principals," districts must also pick up these costs. Time costs for principals vary with each project, and their years (#s) of participation. The range is from 4 to 10 days of training per year. The time costs for teachers vary with the plans carried out.

PROGRAM IMPACT

Developer estimate. Principals have expressed enthusiasm regarding program activities and additional support services from program staff and colleagues. As a result of principals' recommendations requesting more staff involvement in the programs, teachers will be trained next year, and a teacher leader will join the principal in preliminary planning activities. The coaching component has been identified by principals as the strongest aspect of the program. It provides an additional level of security and enables principals to practice learnings through a structured schedule of coaching activities.

Other evaluative data. A number of evaluative procedures will be utilized at the end of the 2 to 3 year program: comparisons of pre/post assessment data as measured by the Connecticut instrument; comparisons of MEAP (Michigan Educational Assessment Program) scores; and results of pre/post tests to assess principals' knowledge of effective schools/effective teaching practices.

Current evaluation reports indicate that the participants view the projects as practical and relevant to their roles as instructional leaders. The trained coaching they received in their districts to help them implement the skills they acquired was seen as a particular benefit. The greatest need cited by most participants was more involvement of teachers in the training. This need will be addressed in the second year of the projects, with plans being made to include lead teachers from each participating building.

MATERIALS AVAILABLE

Effective Teaching/Effective Schools Notebook. (available only to program participants)

Text: *Teaching Makes a Difference.* Cummings, C. 1981. (available from Teaching, Inc., 331 8th Avenue South, Edmonds, Washington 98020. $7.50)

Effective Teaching/Effective Schools bibliography. ($1.00)

Program Evaluation reports:

Interim Evaluation Report (Year One) for the Middle Cities Education Association Project on Educational Leadership Training of Elementary Principals (FIPSE Project). Dr. G. Iverson, Project Evaluator, August 1984. ($0.50)

An Evaluation of the 1983-84 Activities of the Middle Cities Education Association KELLOGG Project. Dr. M.G. Hunter, Project Evaluator, May 1984. ($0.50)

CONTACT FOR FURTHER INFORMATION

Dr. Robert Muth, Executive Director, Michigan Middle Cities Association, Michigan State University, 516 Erickson Hall, East Lansing, MI 48824. (517) 355-1720.

Dr. Lawrence Lezotte, Program Director. Kellogg Inservice Program. (517) 353-9024.

Ms. Lynn Benore, Program Director. FIPSE Inservice Program. (517) 355-1720.

PROJECT SHAL

Area 1 St. Louis School District
5234 Wells Avenue
St. Louis, MO 63113

SPONSOR: Area 1 St. Louis School District

OBJECTIVES/NEEDS ADDRESSED

Project SHAL is a program of educational intervention organized around Edmonds' effective school factors. The goal of the program is two-fold: (1) to bring the average academic achievement of students in participating Area 1 schools up to national norms, and (2) to develop an educational program that can be replicated. The first letters in the names of the original four project schools (*S*towe Middle, *H*empstead, *A*rlington, *L*aclede) form the acronym SHAL.

USERS OF THE PROGRAM

The program is in use in 20 non-integrated Area 1 school sites (15 elementary schools, 5 middle schools) in north St. Louis. SHAL will be entering one high school in the coming year. The socioeconomic status level is unskilled and blue-collar. The student population in the SHAL project is 100 percent black.

Users who can be contacted for further information are:

Edgar Burnett, Principal, Stowe Middle School, St. Louis, MO (314) 382-7310

Roger Twist, Principal, Hempstead School, St. Louis, MO (314) 382-2011

Gerald DeClue, Principal, Gundlach School, St. Louis, MO (314) 383-0913

PROGRAM OVERVIEW

Background. A 1979 survey of Area 1 schools by Superintendent Rufus Young revealed low student achievement in basic skills. Dr. Young obtained a Danforth Foundation grant to design Project SHAL in four Area 1 schools in 1980. The program model is based on Edmonds' effective schools research and Dr. Young's efforts to meet the needs of Area 1 students.

Procedures. The organization and implementation activities involved in Project SHAL span a 2 to 3 year period. In the original four SHAL sites, an Administrative Council comprised of two to five representatives from each school met monthly to study effective schools research and formulate program goals and objectives.

There are five stages in the SHAL replication model, beginning with *Orientation and Assessment.* Through informational meetings, visits to effective school sites, awareness sessions and training, all members of the school community learn about effective schools research and practice. School task force groups are formed and function throughout the stages of involvement in the project. School task force groups are formed and function throughout the stages of involvement in the project. Among their responsibilities is that of becoming knowledgeable in the content regarding the five effective schools factors. Task force members receive technical assistance in analyzing assessment results and disseminating these to school staffs.

The *Planning and Design* stage for Project SHAL occurs during a 4-week summer institute where participants identify programs, directions and strategies for building-level implementation.

In the *Implementation* stage, school staffs put activities and programs into place which address their needs in all five effective school factors.

Renewal occurs as existing programs are reinforced, and schools reexamine their philosophies, goals and instructional strategies. New activities are introduced and implemented based on reassessment information, and program evaluation.

Institutionalization involves the school's ownership of program activities and commitment to carry out the process on their own.

Assistance and resources available. SHAL program supervisors provide approximately 1 day of weekly service to each participating school. Technical assistants (college/university professors) provided additional support and visited schools on a regular basis in the developmental stages of the project.

Training efforts and inservice programs are coordinated by SHAL staff. SHAL incorporates a variety of instructional models in its staff development programs, including Madeline Hunter's work, TESA, Missouri math, and clinical supervision. A *SHAL In-Classroom Chapter 1 Program Manual* was developed to present a model which allows for team coordination between the Chapter 1 teacher and the regular classroom teacher.

SHAL is limited to St. Louis schools, but the support staff is willing to supply advice regarding adaptation.

CONDITIONS REQUIRED FOR EFFECTIVE IMPLEMENTATION

Entry. The SHAL program is designed for non-integrated schools within Area 1. Schools are selected based upon socioeconomic status characteristics and location within Area 1.

Operations. The SHAL Summer Institute is open to all SHAL principals and staff. The focus is on school plan development based on assessment results and content related to effective school strategies. Participants receive a stipend to attend. Additional inservice and planning time takes place after school hours. There is no dollar cost to participating schools.

FEATURES OF SPECIAL INTEREST

The involvement of an Administrative Council, which participates in the development of the program model, provides local ownership and commitment to SHAL activities. School task force groups have responsibility for program implementation, leading to increased institutionalization efforts. The SHAL In-Classroom Chapter 1 model offers an effective resource for improving instruction for Chapter 1 students. A variety of orientation activities allow prospective participants many opportunities to become knowledgeable in effective school practices and SHAL's goals.

COSTS

Start-up. Time costs include attendance at orientation, participation in the Summer Institute and inservice training, and attendance at committee planning sessions. Hours vary for in-school meetings. Schedules are arranged at local sites.

Operations. SHAL provides all inservice training/support services. There is no cost to participating schools.

PROGRAM IMPACT

Developer estimate. The original SHAL sites have "turned around." Improved school climates and stronger instructional leadership are evident in the first four SHAL sites. The Madeline Hunter instructional model, Mastery Learning, and Missouri math programs have been implemented in SHAL schools. The establishment of school task forces has led to improved communication. All SHAL principals are now utilizing a clinical supervision model.

Other evaluative data. Results of pre/post California Achievement tests show that students in Project SHAL schools gained in achievement in nearly all areas tested.

MATERIALS AVAILABLE

Project SHAL: An educational intervention program for the development of more effective schools (1st year report, 1980-81).

Project SHAL Needs Assessment Instrument, 1981.

SHAL In-Classroom Chapter 1 Model Manual, 1983.

Young, M. S. 1979. Reading for Mastery.

SHAL Project Manual (program overview and improvement strategies). (in publication)

(Materials will be provided on an availability basis. Prices to be determined; will include reproduction and postage costs.)

CONTACT FOR FURTHER INFORMATION

Dr. Rufus Young, Jr., Area Superintendent, St. Louis Public Schools, Area 1 Office, 5234 Wells Avenue, St. Louis, MO 63118. (314) 361-6358.

Susan Durns, SHAL Program Supervisor, Area 1 Office. (314) 361-6358.

Dr. John B. Ervin, Vice President, Danforth Foundation, 231 So. Bemiston, St. Louis, MO 63105. (314) 862-6200.

Dr. Charles Achilles, Professor of Education, Bureau of Educational Research, University of Tennessee, College of Education, Knoxville, TN 37996. (615) 974-2272.

SCHOOL IMPROVEMENT PROJECT (SIP)

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New York City Board of Education
131 Livingston Street
Brooklyn, NY 11201

SPONSOR: New York City Board of Education

OBJECTIVES/NEEDS ADDRESSED

The primary goal of the School Improvement Project is to improve pupil achievement in reading, math and writing through a school-based planning process. Participating elementary schools can strengthen their problem-solving abilities, evaluate and reorganize existing programs and resources, and implement specific improvement plans to meet school needs.

USERS OF THE PROGRAM

Twenty-nine public elementary schools in 16 New York City districts are SIP participants. The socioeconomic status mix is mainly blue-collar and unskilled, with black and Hispanic students numbering an average 93 percent. Four high schools, with similar populations, are implementing a high school version of the program.

The program is limited to schools in New York City, but the program staff is willing to provide advice on adaptation elsewhere.

Users who may be contacted for further information are:

Alan Finkelstein, Principal, PS 57, District 12, Bronx, NY (212) 367-9446

Anthony Sanfilippo, Superintendent, District 24, Queens, NY (718) 326-8341

Iran Pelcyger, Principal, PS 384, District 32, Brooklyn, NY (718) 574-0382

PROGRAM OVERVIEW

Background. The SIP model for school-based planning, one of the first in the country, was developed by the late Ronald Edmonds, when he served as Senior Assistant for Instruction to the Chancellor of the New York City Board of Education. The concept is based on organization development theory, and effective schools research. SIP activities focus on the five effective schools factors identified by Edmonds as critical to the improvement of pupil achievement: instructional emphasis on basic skills; strong instructional and administrative leadership; a school climate conducive to learning; the use of ongoing assessment of pupil progress; and high expectations for pupil achievement. Organization development processes form the basis for the team planning model.

Procedures. The eight-stage SIP process takes approximately 2 years to complete. Ten School Liaisons, who work in pairs with each school, serve as facilitators and trainers, guiding schools through the process. School entry is determined by staff acceptance of SIP goals, a commitment to the SIP process, and district approval.

A needs assessment report based upon interview and questionnaire data is prepared by the Liaisons. The report, which describes strengths and areas in need of improvement in each of the five factor areas, is analyzed by a school improvement committee comprised of administration, teachers, support staff and parents. A written school improvement plan focusing on needs in each factor is developed by the team and shared with the entire school community for reaction and feedback.

Once the plan is approved by the staff, it is implemented based upon established time lines. Training workshops, necessary resources and on-site technical assistance are provided/coordinated by the SIP Liaisons. Based upon results of ongoing evaluation and reassessments of school progress, plans are revised and updated by the school committee. Institutionalization (when the school assumes responsibility for ongoing planning and implementation) is the primary focus during the third/fourth years.

A High School Improvement Project was initiated in 1983. Four New York City high schools are participating. The program utilizes the same SIP process in assessing needs and developing improvement plans at the high school level. The emphasis is on reduced drop-out rates and improved instruction.

Assistance and Resources Available. The ten Liaisons, who are school-based, spend 2 days per week in first- and second-year schools, and 1 day per week in third- and fourth-year schools. They conduct the needs assessment, guide the planning committee, monitor the development and implementation of the school plan, serve as trainers, and help to obtain needed resources. The project offers seminars for principals, staff training sessions, and training for planning committee leaders. Foundation grants enable the project to provide seed money to schools for materials, resources and training needed to implement plan activities. SIP has provided annual stipends for committee members to meet after school hours and implement program activities.

CONDITIONS REQUIRED FOR EFFECTIVE IMPLEMENTATION

Entry. Schools join SIP voluntarily, once they have made a commitment to SIP objectives and the school-based planning process. Staff members must be willing to participate in the needs assessment interview/questionnaire process, select a planning team to meet after school hours, and become actively involved in the development and implementation of plan activities.

Operations. Planning committee members meet weekly in first-year schools, and bi-weekly or monthly in

second-, third- and fourth-year schools. All staff members are encouraged to attend regular SIP sessions, as well as weekly subcommittee meetings devoted to discussion of needs/plans in each factor area.

FEATURES OF SPECIAL INTEREST

The School Liaisons, who have expertise in curriculum development, staff training, and knowledge of materials and resources, are school-based, and able to offer support and guidance in implementation of project activities. Schools receive Liaison services throughout their association with the School Improvement Project.

SIP utilizes comprehensive, open-ended data-gathering instruments which provide detailed information on school characteristics, and allow respondents to add additional data. The Office of Educational Evaluation at the Board of Education provides evaluation services to SIP, enabling the project to conduct intensive documentation and evaluation, and timely revision of program activities.

COSTS

Start-up. Staff time commitments include attendance at an orientation session on the SIP process, and one period (45 minutes) to complete the SIP interview or questionnaire.

Operations. Two-hour SIP Committee meetings are held after school for a total of 12 or more sessions yearly. Committee members are paid an annual stipend for their participation. Subcommittees, which are formed to explore plans and activities in the five factor areas, meet regularly, during school hours. All regular committee meetings and subcommittee meetings are open to all members of the school staff.

There are no additional dollar costs to schools in New York City aside from the use of school funds for implementation of plan activities.

PROGRAM IMPACT

Developer Estimate. All 29 elementary schools have implemented a school planning process to assess needs and develop improvement plans. Improvement in basic skills has been most successful through implementation of school-wide reading, math and writing program. Improvement in school climate/discipline has occurred through the development of school handbooks listing school policies and procedures, school-wide discipline codes, implementation of new lunchroom procedures, and safety and security programs. Some schools have instituted innovative programs in peer tutoring, test sophistication, and parental involvement.

Other Evaluative Data. SIP funds are used to obtain evaluation services from the Office of Educational Evaluation (OEE), at the Central Board of Education. OEE reports show that School Improvement Project schools significantly exceeded city-wide gains in reading and math (on California Achievement Tests and New York City Math tests) over the past four years. Analysis of yearly reassessments of interview and questionnaire data, along with yearly review of attendance figures and Liaison progress reports, shows that SIP-related activities have led to improvement in all five factor areas. Approximately half of SIP schools have begun to institutionalize the process, and are now able to implement the SIP cycle on their own.

MATERIALS AVAILABLE

Contact Anthony Spina, School Improvement Program, 131 Livingston Street, Brooklyn, NY 11201:
Program Overview
SIP Filmstrip & cassette
(cost to be determined)
Needs Assessment Instruments
Contact Jane Canner, MEDARP Documentation Unit, Office of Educational Evaluation, 110 Livingston Street, Brooklyn, NY 11201 (212) 596-8376:
SIP Annual Evaluation Reports 1980, 1981-82, 1982-83, 1983-84
High School Improvement Project Annual Assessment Report 1983-84
Article: McCarthy, D. and T. Clark. School Improvement in New York City: The Evolution of a Project. *Educational Researcher,* April 1983.

CONTACT FOR FURTHER INFORMATION

Anthony Spina, Project Manager, School Improvement Project, New York City Board of Education, 131 Livingston Street, Brooklyn, NY 11201. (718) 596-6007.
Dennis McCarthy, High School Improvement Project, New York City Board of Education. (718) 596-6007.

LOCAL SCHOOL DEVELOPMENT PROJECT (LSDP)

20

New York Urban Coalition
99 Hudson Street
New York, NY 10013

SPONSOR: New York Urban Coalition and New York City Board of Education

OBJECTIVES/NEEDS ADDRESSED

The Local School Development Project (LSDP) is a joint effort of the New York City public schools and the New York Urban Coalition. Its goals are to raise student achievement through improved curriculum instruction and school operations, to promote school-based planning efforts, to develop building-level capacity for initiating change, and to mobilize all resources of the school community in order to improve schools. LSDP encourages schoolwide collaboration around a common aim—developing the capacity of the school communities to respond accurately and effectively to youngsters' needs.

USERS OF THE PROGRAM

The program is in current use in seven large New York City districts (mostly inner city). Black and Hispanic students number from 50 to 100 percent. The socioeconomic status range is low, mainly unskilled/blue-collar. LSDP schools in the seven districts total 31 elementary, 11 junior high/middle, and 2 high schools.

The program is limited to New York City schools, but the program staff is willing to give advice on adaptation of the program elsewhere.

Users who may be contacted for further information are:

Herbert Baldwin, Principal, PS 178, District 23, Brooklyn, NY (212) 495-7768

Debbie McGriff, Coordinator, Junior High School Programs, District 13, Brooklyn, NY (212) 636-3214

Stuart Kellarman, Teacher, Committee Chair, IS 158, District 12, Bronx, NY (211) 542-1155

PROGRAM OVERVIEW

Background. A council on local school development, organized by the Urban Coalition in 1978, served as an advisory group regarding the program design. Members included representatives of the United Federation of Teachers, United Parents Association, Council of Supervisors and Administrators and the Central Board of Education. The model incorporates a cultural view of schools, research in school change (Lieberman, Goodlad), and organization development (Miles) with a political theory of school development (as developed by Lynn Gray and other program staff). LSDP is supported by an Urban Coalition grant and New York City Board of Education funding.

Effective schools research was included in the design as the program evolved. The first implementation was in Fall 1979.

Procedures. Interest in joining LSDP is initiated at the district level. Awareness presentations are conducted for superintendents, who may nominate district schools. A second awareness session is held at the school level to familiarize administration/staff/parents with LSDP goals and objectives. All school groups must reach consensus regarding participation before a school joins the program. LSDP consultants provide support to schools throughout the assessment, planning and implementation stages. In addition, each district superintendent is responsible for assigning someone from the district staff to serve as district coordinator for LSDP schools.

Consultants/District Coordinators assist principals in organizing a school planning team whose primary function is to design a method for selecting/electing a school task force comprised of the school's principal, union representative, and teacher and parent representatives.

The task force's first effort is to conduct an assessment of their school within a 1-month period. Data are compiled from student achievement results, attendance figures, and survey responses. School profiles are prepared by the Office of Educational Evaluation at the Central Board of Education. LSDP consultants conduct workshops for task forces in methods of data collection and analysis. Needs assessment information is used to develop long range goals and objectives which are later implemented throughout the school. Plan development now takes approximately 1 year, with implementation of some aspects beginning during planning.

The first set of LSDP schools has continued the work for 4½ years; the normal expectation is that the planning and implementation functions will remain in the school indefinitely, as an increased capacity for improvement.

Assistance and resources available. LSDP consultants and additional Urban Coalition staff provide a wide range of services, based on interest and need, to superintendents, principals, teaching staff, and parents. LSDP sponsors training sessions for task force chairpersons and planning committees. Principals of LSDP schools participate in a Principals' Leadership program. They attend workshops on management, working in groups, school-based planning, and instructional issues. A Superintendents' Forum enables district leaders to exchange ideas and share successes. Workshops, conferences, seminars, and on-site assistance have covered many topics identified by project schools including comprehensive planning, decision-making, arts in education, and planning a reading program.

The district coordinator provides additional on-site support to LDSP schools in planning and implementing their comprehensive education plans. He/she coordinates the work with the school by facilitating, training and obtaining needed resources.

Two resource guides are available for use by school task

forces: A Guide for Planning Teams and A Guide for Comprehensive Planning. LSDP also assists schools in gaining access to resources within and around New York City.

The LSDP program staff are now developing procedures for continuing maintenance support of schools, including training for district staff, and periodic meetings of school representatives.

CONDITIONS REQUIRED FOR EFFECTIVE IMPLEMENTATION

Entry. A consensus of all members of the school community is necessary should a school wish to join LSDP. A willingness by the school staff to form and support the efforts of a planning committee is needed. The superintendent is responsible for assigning a district coordinator to team with the LSDP consultants, enabling the principal to attend leadership seminars, and providing district office support for program activities and continuous review of the project. A written memorandum of agreement outlining expectations and responsibilities of LSDP, the district, and the principal is reviewed and signed by all parties prior to program entry.

Operations. Task force members attend biweekly planning sessions. Meeting schedules are arranged by each school. Task forces can meet during the school day (at lunch, or during periods arranged by the principal), or before/after school. Principals attend leadership workshops, participate in local district networking meetings to follow-up workshop activities, and meet periodically with the district coordinator/consultant to plan and review project progress.

FEATURES OF SPECIAL INTEREST

The partnership between New York City Board of Education and the Urban Coalition allows for combined efforts toward school improvement. The focus on working with all levels of the school system (district, school, central board) encourages greater communication and delivery of needed services.

The program is strong on provision of process-relevant training for participants.

LSDP's efforts to tap the talent of people within the school, as well as enhance their capacity to do better by identifying and bringing in additional resources, build capacity for school improvement at the local level.

LSDP's aim to support institutionalization of the improvement process in local schools and districts is noteworthy.

COSTS

Start-up. District superintendents are responsible for assigning a staff member to serve as LDSP District Coordinator. Ten to fifty percent of this person's time is usually devoted to LSDP activities. A series of orientation meetings (two to six sessions) are necessary to familiarize all school district groups with the program.

Operations. Planning teams meet biweekly for a minimum of 90 minutes. Time costs for principals include participation in four to five leadership seminars per year. Committee chairpersons attend three to four full day workshops each year. Principals/District Superintendents are responsible for arranging coverage.

There is no dollar cost to LSDP schools for consultant services and program activities.

PROGRAM IMPACT

Developer estimate. LSDP schools have implemented a variety of projects to improve instructional performance and delivery of school services (comprehensive schoolwide reading programs, career education activities in all content areas, arts programs, special electives in junior high schools, improved safety and security programs). Improved school climate and strengthened working relationships between administrators, teachers, and parents have been attributed to LSDP involvement. Each LSDP school now has a trained planning team capable of comprehensive planning. One principal comments: "The most important thing is that people are beginning to think in terms of plans to solve problems. They're meeting together, discussing problems, and I'm part of those meetings."

Other evaluative data. LSDP schools have achieved increases in reading and math scores that have surpassed citywide increases. The 30 schools which have been part of the project over a 3-year period had an average *gain* of 22 percent reading at or above grade level compared to a 15.2 percent gain for city schools over the same time period, 1979-80 through 1982-83.

The program has resulted in growing district commitment to and support for comprehensive planning. Seven of the initial eight districts are continuing to provide support and inspiration for the continuation and expansion of comprehensive planning. Participants' ratings of LSDP training and use of networking activities provided by the program were high. Ninety-one percent of the principals and 86 percent of the planning team members who said they had participated in training/workshops claimed that these activities were useful to them in their work.

MATERIALS AVAILABLE

Making Local School Development Work 1981, program description. (no charge)

The following materials are available only to LSDP schools:

Comprehensive Planning Manual, 1983.

The Planning Team Manual, 1983.

Chairpersons Written Comprehensive Plan and Guide, 1983.

CONTACT FOR FURTHER INFORMATION

Bonnie Epps, Director of LSDP, or Patrick Montesano, Coordinator of Research and Development, LSDP, New York Urban Coalition, 99 Hudson Street, New York, NY 10013. (212) 219-1330.

MIDDLE GRADES ASSESSMENT PROGRAM (MGAP)

21

Center for Early Adolescence
Carr Mill Mall, Suite 223
Carrboro, NC 27510

SPONSOR: Center for Early Adolescence

OBJECTIVES/NEEDS ADDRESSED

The program is designed to help its users become aware of the developmental needs of young adolescents (middle grades), to understand the characteristics of academically effective schools that are responsive to these needs, and to enable school self-assessment and plans for improvement.

USERS OF THE PROGRAM

The program is in use in 12 school districts in large city, smaller city, and suburban settings; one is rural. The socioeconomic status level is blue-collar and unskilled, with some middle-class. Minority percentages (including black, Hispanic and Southeast Asian) range from few to 50 to 80 percent. Fifteen to twenty middle schools and junior high schools have been involved.

Users who may be contacted for further information are:

Dr. Barry Rice, Principal, Brogden Middle School, Durham, NC (919) 477-7893

Helen Hatcher, Principal, Francisco Middle School, San Francisco, CA (415) 392-8214

PROGRAM OVERVIEW

Background. The program was developed by Gayle Dorman of the Center, beginning in 1980. It relies centrally on the research on early adolescent development, as well as on effective schools (Edmonds, Rutter, Weber). Field testing was carried out in the spring of 1981, and first full-scale use began in July of 1982 with six schools.

Procedures. Following a school's (usually the principal's) decision to proceed, the principal forms an assessment team of 8 to 16 people, usually including teachers from all parts of the school, support staff, and sometimes parents. The team is led by teachers, who have a Leader's Manual, and may receive special training.

The team reads the User's Manual, and receives 6 to 8 hours of training in goal-setting and the use of observation and interview instruments. They collect data (technical assistance available during the process) from all teachers, and from a 5 to 10 percent sample of students and parents, covering most classrooms. They synthesize the data, and set goals. Typical goals include improvement of school climate, discipline, attitudes and philosophy; later goals usually involve curriculum and instruction. (This is accomplished in about one semester).

The plan resulting from the goal-setting is then implemented, with a time line ranging from a semester to another full year or several years.

Assistance and resources available. Staff from the Center for Early Adolescence, or trainers trained by them, will supply repeated phone consultation, carry out training of team leaders, conduct the initial 6 to 8 hours of training for the team and the team leaders, and provide follow-up on-site support. However, the program is designed for self-implementation, based on the materials, and can be carried out with minimal external support.

CONDITIONS REQUIRED FOR EFFECTIVE IMPLEMENTATION

Entry. School participation should not be forced by the central office. The principal must provide leadership for assessment and school improvement effort. Full representation of school staff is needed.

Operations. It is important for the principal to understand that the process produces consensus around the need for specific changes, and to be clear about the decision-making process to be followed in making changes. Active principal engagement and support is important. The process can also be expected to be demanding in terms of time spent (see COSTS).

FEATURES OF SPECIAL INTEREST

The program's emphasis on adolescent development, in the middle school/junior high school setting, makes it unique among effective schools programs. Its basic intent is that of self-assessment. Because of teacher leadership, the process creates a good deal of momentum, and is itself a strong staff development intervention.

COSTS

Start-up. The program begins with 2 days of training for the assessment team. The assessment work (observation, interviewing and data synthesis) requires about 250 to 400 hours. The User's Manual is $7.50 per person on the Assessment Team; Leader's Manuals are $12. Center staff will provide telephone consultation free of charge. If direct assistance is supplied by Center staff, the typical cost of a contract is $2,500, covering phone consultation and training of leaders or of the Assessment Team.

Operations. Time costs after the assessment period vary according to extensiveness of planning and implementation; recurrent meetings of the Assessment Team are likely.

PROGRAM IMPACT

Developer estimate. Use of the program improves climate, specifically a sense of momentum and optimism about improvement. There is typically a better understand-

ing of early adolescent children, along with reconsideration of instructional methods and increased involvement of students. MGAP-derived ideas often appear in teacher observation and evaluation mechanisms in the school.

Other evaluative data. Site visits (see Dorman, 1983), along with documentation and user reports (*MGAP News Notes*, 1(1), 1984), support gains in academic effectiveness, self-exploration by students, student sense of competence and achievement, increased student participation and interaction, and clearer discipline structure and limits.

MATERIALS AVAILABLE

Making Schools Work for Young Adolescents, program description. (no charge)

Middle Grades Assessment User's Manual (under revision in 1984-85, $7.50)

Leader's Manual (under revision in 1984-85, $12.00)

Slide-tape presentation. ($75.00)

Dorman, G. 1983. Making schools work for young adolescents. *Educational Horizons, 61*(4):175-182.

MGAP News Notes (newsletter for users). (no charge)

CONTACT FOR FURTHER INFORMATION

Gayle Dorman, Director of Training, or Sara Wiseman, Assistant Director of Training, Center for Early Adolescence, Carr Mill Mall, Suite 223, Carrboro, NC 27510. (919) 966-1148.

SCHOOL IMPROVEMENT IN BASIC SKILLS

22

Cincinnati Public Schools
230 East 9th Street
Cincinnati, OH 45202

SPONSOR: Cincinnati Public Schools

OBJECTIVES/NEEDS ADDRESSED

School Improvement in Basic Skills provides a structure and activity sequence to raise academic achievement of students, with special emphasis on reading, writing and mathematics. Criteria for improvement are gains in instructional performance on student achievement tests in reading and math for 2 consecutive years. The program focuses on development of effective teaching strategies, classroom management, and instructional leadership through a series of school-based planning activities.

USERS OF THE PROGRAM

The program is in current use in 26 Cincinnati schools, including 17 elementary, 6 middle/junior, and 3 high schools. The Cincinnati district (large urban) has a wide socioeconomic status range. Minority percentages run from 10 to 90 percent black.

Users who may be contacted for further information are:

Robert Gazaway, Principal, Hartwell Elementary School, Cincinnati, OH (513) 821-2114

C. Maude Thompson, Principal, Roll Hill Elementary School, Cincinnati, OH (513) 542-9111

Mary Baughman, Principal, Sawyer Junior High School, Cincinnati, OH (513) 281-8130

PROGRAM OVERVIEW

Background. A central office team, with input from a local steering committee, developed the SIP Basic Skills model in 1980. Effective schools literature (Edmonds, Brookover, Lezotte) and effective teaching literature (Hunter, Stallings) were utilized in formulating the program model. A local study, conducted by the Cincinnati Evaluation Branch, applied national research to local needs, in preparation for program implementation. Seven school effectiveness characteristics were identified as the focus for basic skills improvement. The program has expanded from 6 schools in 1980 to 22 schools in 1984.

Procedures. Schools that show a declining trend in student achievement in reading and/or math for two consecutive years are asked to participate in the program. School Leadership Teams (principals and staff representatives) are responsible for assessing needs, planning improvement activities, and coordinating inservice training programs.

School profiles, distributed to principals during a SIP Leadership Academy in August, include achievement test results for the previous year, and results of School Information System (SIS) survey data collected from administrators, teachers, students and parents, over a 3-year period. School Leadership Teams analyze profile data, identify priority needs related to effective school variables, and develop/modify action plans.

Specific improvement strategies are developed by staff committees during the action planning stage. The program provides a listing of recommended resource personnel in all curriculum areas. Proposals outlining training goals and activities are submitted. SIP Basic Skills provides 12 hours of paid inservice time for instructional staff (can be used for assessment process, planning, staff development). Ongoing evaluation of plan activities and training objectives provides data for yearly revision of program components.

Assessment, planning and implementation cycles can be completed in one school year.

Assistance and resources available. Central office staff (subject area supervisors; resource, planning and development personnel) assist schools in profile analysis, plan development, and inservice components. SIP Basic Skills sponsors three workshops for school teams each year. The focus is on updating skills and sharing experiences. A 3-day summer Leadership Academy for principals is devoted to review of effective schools research, leadership training and plan development. A program handbook, effective teaching modules, and content-oriented reading and writing curriculum guides are available.

The program is limited to Cincinnati schools, but support staff members are willing to supply advice regarding replication.

CONDITIONS REQUIRED FOR EFFECTIVE IMPLEMENTATION

Entry. The program requires commitment to the collaborative planning process and willingness of the school team to meet and fulfill responsibilities.

Operations. Teams are responsible for sharing effective school information with staff, and coordinating improvement efforts.

FEATURES OF SPECIAL INTEREST

SIP focuses on basic skills achievement/instructional leadership, and emphasizes each school's ownership of the program through self-assessment, school-based planning, and organization of inservice activities. A wide selection of Basic Skills materials and resources is available to participating schools. Monitoring efforts have been increased in 1984-85, allowing program consultants to assess status of implementation and provide feedback to principals/staff.

COSTS

Start-up. Time costs for the summer leadership academy total 3 days. Members of leadership teams attend a 1-day orientation session. The program provides substitutes. There are no added dollar costs for Cincinnati schools.

Operations. Teams attend two additional workshops per year (1 day each). Time for on-site working sessions varies from school to school, and can be incorporated into 12 hours allocated for inservice training. Staff meetings, when teams share SIP activities/plans, are scheduled by the principal. There are no added dollar costs for Cincinnati schools.

PROGRAM IMPACT

Developer estimate. The program has energized the district and motivated teachers. Leadership teams have provided valuable assistance to principals in planning/implementing improvement efforts. Achievement scores have increased throughout the district; much of the increase is from SIP schools. Impact has been seen in improved instructional leadership, climate, staff morale, and teacher expectations.

Other evaluative data. Internal evaluations of SIP Basic Skills are based upon review of annual achievement scores, comparisons of school profiles, and district ranking. A 1982-83 evaluation reports that SIP elementary schools outperformed the district by 0.4 NCEs (normal curve equivalents) in reading, and 1.0 in mathematics. Junior high schools also averaged gains slightly above the district average in reading and mathematics.

MATERIALS AVAILABLE

SIP brochure. (no charge)
Sample school profile. (no charge)
Survey questionnaires: teacher, administrator, field administrator, central office, student, parent. (no charge for sample copies)
SIP annual report. (no charge)
SIP Handbook: School Improvement in Basic Skills (available to SIP participants)
Improving Reading Comprehension through a Content Approach KIT—*Secondary Schools:* Kit includes training manual, subject guides, trainer's guide, posters, filmstrips. ($75.00)
Improving Reading Comprehension through a Content Approach KIT—*Elementary Schools,* Grades 4-6. ($75.00)
Improving Reading Comprehension through a Content Approach KIT—*Vocational Schools.* ($85.00)
Writing Workshop KIT: *Secondary level.* ($75.00) *Elementary level.* ($75.00)
Writing Across the Curriculum Guide (K-12). ($75.00)
Effective Teaching Strategies Training Modules. ($60.00)

CONTACT FOR FURTHER INFORMATION

John Grate, Director, Resource Planning and Development Branch, Cincinnati Public Schools, 230 East 9th Street, Cincinnati, OH 45202. (513) 369-4870.
Dr. Zulfi Ahmad, Assistant Director, Resource Planning and Development Branch. (513) 369-4000.

SCHOOL IMPROVEMENT PROGRAM

23

Institute for Development of Educational Activities, Inc. (I/D/E/A/)
259 Regency Ridge
Dayton, OH 45459

SPONSOR: Institute for Development of Educational Activities

OBJECTIVES/NEEDS ADDRESSED

The School Improvement Program helps schools learn to use a systematic problem-solving process to set long range goals, and plan activities to meet these identified needs. The focus is on training local facilitators, and building capacity of school-based staff to design and implement their own long-range improvement programs. A continuous cycle of dialogue, decision, action and evaluation (DDAE) is emphasized throughout the improvement process.

USERS OF THE PROGRAM

The program is in current use in 18 districts, representing 4 states (Washington, New York, Indiana, and Michigan). Districts include city, suburban and rural areas, with a wide socioeconomic status range. Minority percentages, especially in city districts, range from 0 to 90 percent, mostly black, but with some Hispanic and Native American. Seventy-five schools, including 25 elementary, 10 middle/junior high, and 40 high schools, are participating in the School Improvement Program.

Users who may be contacted for further information are:

Robert Freeland, Supervisor, Staff Development, Kenmore-Town of Tonawanda, Kenmore, NY (716) 877-6800

Elizabeth Ennis, Principal, Hammond High School, Hammond, IN (219) 933-0550

Dr. John Armenia, Assistant Superintendent, Peninsula School District, Gig Harbor, WA (206) 857-6171

PROGRAM OVERVIEW

Background. The program grew out of an earlier secondary project titled Individually Guided Education. The current effort was initiated in 1980, at two development sites in Indiana. The research base includes effective schools literature (Edmonds, Rutter), change studies (Rand), and the school leagues concept (Goodlad).

Procedures. Districts have two entry options: to contract with I/D/E/A/ for direct technical assistance; or to sponsor I/D/E/A/ training workshops for district facilitators/change agents, who support improvement efforts in local schools.

I/D/E/A/'s systematic school improvement process has five basic steps: readiness, planning, training, implementation, and maintenance. In initial stages, a planning team, comprised of representatives from all school groups, receives training in four areas: Awareness Building, Team Building, Human Development Activity Building, and Vision Building. At a 2-day retreat, teams design a vision of their ideal school (where we are now; where we could/should be), and identify outcomes to describe how the school would operate in each of nine effective schools components.

The vision is shared with staff and community through Involvement Sessions planned to stimulate discussion, encourage feedback, and secure participant commitment to proposed objectives. Staff members are informed of program activities through a "pyramid group process". Each team representative is responsible for communicating with four to five individuals following each planning meeting.

A Design Task Force is created to translate outcomes and objectives into action plans. The task force and planning team share information with the entire school, propose needed staff development activities, and coordinate implementation procedures. Plans are implemented, reviewed and revised as schools repeat the cycle.

The time line for completion of planning, implementation and evaluation stages is 15 months.

Assistance and resources available. I/D/E/A/ provides local training for district coordinators, or 20 days of direct technical assistance during a 15-month school improvement cycle. A comprehensive facilitator's guide contains overview materials, workshop agendas and activities, selected readings, and an annotated bibliography. Films, illustrating vision building activities, are available for use during training sessions. I/D/E/A programs are available to school districts throughout the country.

CONDITIONS REQUIRED FOR EFFECTIVE IMPLEMENTATION

Entry. The program requires district support (personnel and resources) and willingness of principal and staff to engage in collaborative planning.

Operation. The program's success depends on local ownership, collegial involvement of participants and sustained commitment to achieve "vision goals."

FEATURES OF SPECIAL INTEREST

The School Improvement Program encourages broad-based support and involvement from the entire school community. Activities seek to develop local ownership and accountability through participatory decision making. The emphasis on vision building, clear images of the future, and explicit design work is noteworthy. The process is well designed, and advocates long term, continuous planning, providing sufficient time for effective implementation. A well-developed, comprehensive training manual offers experiential activities and resources for local facilities.

COSTS

Start-up. Time costs for local training of planning team members total 12 to 15 days. Districts are responsible for providing substitutes.

Operation. The equivalent of 10 days per year (for meetings, feedback, team retreat, design team efforts and implementation) is required of each staff member directly involved in planning and/or implementing the program.

Contract costs with I/D/E/A/ vary with the amount of staff, time, and expenses, as well as whether direct assistance or training for local facilitators is involved. A typical contract for full-scale direct assistance over a 15-month period runs from $6,500 to $10,000 plus travel expenses; lesser amounts of assistance can be negotiated. A typical contract for training local facilitators is about $1,000 plus travel and living expenses at the training site.

PROGRAM IMPACT

Developer estimate. The program has resulted in more participatory decision making, goal-focused planning, increased vision building and strengthened commitment to school improvement.

Other evaluative data. Developmental sites in Indiana reported student achievement increases on all levels of the California Achievement Test, 100 fewer teacher absences following the first year of the program, and improved parent involvement. Three of the schools identified by Secretary Bell as schools of excellence had participated in the I/D/E/A/ school improvement process. Five schools identified by the Ford Foundation as the most improved urban schools were also I/D/E/A/ school improvement sites.

MATERIALS AVAILABLE

Training Notebook, 1983. (available only to participants)
I/D/E/A/ Newsletters. (available on request, no charge)

CONTACT FOR FURTHER INFORMATION

Dr. John Bahner, President, I/D/E/A/, 159 Regency Ridge, Dayton, OH 45459. (513) 434-6969.
Gil Johnson, Program Associate, I/D/E/A/. (513) 434-6969.
Gary Phillips, Director, Butler Leadership Center, Butler University, College of Education, 4600 Sunset Avenue, Indianapolis, IN 46208. (317) 283-9560.

EFFECTIVE SCHOOLS

KEDS—Kent State Center for Educational Development and Strategic Services
Wright Hall, Kent State University
Kent, OH 44242

SPONSORS: KEDS Desegregation Assistance Center and Kent State University

OBJECTIVES/NEEDS ADDRESSED

Goals include improving the total educational performance at the school building level, by altering the correlates of effective schools through a school-developed program for improvement, and seeking changes in achievement, discipline, climate, morale, and staff development. The program originally emphasized minority student achievement in a desegregation context, and has now expanded to include all pupil classifications.

USERS OF THE PROGRAM

The program is in use in 35 Ohio school districts, including large and small urban areas, as well as some suburban and a few rural districts. The socioeconomic status range is wide. The percentage of minorities, especially in the city districts, ranges from 50 to 75 percent, mostly black, with some Hispanic.

Altogether, 122 schools are involved, including 90 elementary, 26 middle/junior high, and 6 high schools.

Users who may be contacted for further information are:

Mel Coleman, Assistant Superintendent, Mansfield Public Schools, OH (419) 522-0611

Dr. Violet Strabler, Curriculum Director, Dayton Public Schools, OH (513) 461-3000

Dr. Margaret Fleming, Assistant to Superintendent, Cleveland Public Schools, OH (216) 574-8000

Pat Fletcher, Principal, Garfield Elementary School, Steubenville, OH (614) 282-5112

PROGRAM OVERVIEW

Background. The Effective Schools program was developed using ideas drawn from contact with other effective schools programs (Research for Better Schools—SET, Connecticut State Department, Milwaukee, St. Louis), and from formulations of Edmonds, Brookover, and Phi Delta Kappa. Early initiative was taken following a joint symposium with the Ohio Department of Education and Phi Delta Kappa by Kent State University's College of Education. The first implementation was in the fall of 1981. (Kent State University solicited collaboration from the Ohio Department of Education and Phi Delta Kappa.)

Procedures. Initial contact for Ohio districts comes either from a request, or through initiative from KEDS; either may occur in a workshop session (such as the OASIS meetings offered by the Ohio Department of Education). The district superintendent must request KEDS involvement even if a single building is involved.

There is a preliminary meeting with the superintendent or designate, then two to four follow-up meetings, held with a district-level committee that includes central office personnel, building principals, and bargaining agent representatives. The first is for orientation. Later ones involve examining available district data (achievement, attendance, suspensions, civil rights violations), and agreeing on areas in the data that need specific improvement attention.

Once there is agreement to proceed with a particular building, a building-level (staff-led) team is formed, including support staff as well as teachers; the superintendent is asked to attend the initial meeting to clarify his or her support for the program. KEDS staff make a presentation to the entire faculty (videotapes, materials). A needs assessment is carried out (modified Connecticut or Phi Delta Kappa instruments); the team collates the results, and reports them to the faculty, who agree on a list of priorities. The program takes about 1 year to reach this point.

KEDS staff help the team develop a clear *mission statement,* relating district philosophy and policy to the needs assessment results, and identifying clear goals and objectives, along with a *plan* that identifies responsibility for implementation activities of the effective schools correlates, and a time line. They also assist the team in identifying other external resources (district, state department and university) that can be helpful. Implementation work occupies the second year; programs tend to continue (most have, since initiation in 1981).

Assistance and resources available. KEDS staff members aid with initial entry, orientation meetings, the needs assessment (if requested), and provide follow-up problem-responsive contact, either by phone or face to face. They also provide comparative information on how other districts are coping with similar problems, suggest resources, and aim to develop linkages and networking among users.

The Effective Schools program coordinates with the Ohio Department of Education program and participates in their OASIS workshops, but does not overlap in provision of services to schools.

CONDITIONS REQUIRED FOR EFFECTIVE IMPLEMENTATION

Entry. Active involvement of superintendent, central office, building principal and bargaining agent representatives is important. The program can work, however, on a district-mandated basis. The superintendent must make support known at a meeting of the faculty.

Operations. It helps to "start small" with improvement projects. Willingness to deal with organizational time

constraints (scheduling, union contract) is important, especially at the secondary level.

The program encourages districts and schools to develop their own approaches to improvement, so local energy is important (though it usually develops further as the program proceeds).

FEATURES OF SPECIAL INTEREST

The program provides strong assistance (*not* regulation or compliance) with the situation of court-ordered desegregation (though it is not limited to such districts). The emphasis on networking and brokering of resources including university, state department, and other districts helps users draw help from many sources. There is an emphasis on continuity of effort.

COSTS

Start-up. Two or three district-level meetings are typically involved, along with building team (typically weekly) and faculty meetings (at least two). Ordinarily, these are held on school time. KEDS is not permitted to charge for time of their staff; in the past they have occasionally provided consultant help from outside their staff as well at no charge. There is no charge for materials.

Operations. Weekly team meetings are typical. Substitute costs, covered by districts, are ordinarily involved, both for team meetings, and for the time of others volunteering to work on specific problems. There is no charge for KEDS assistance, which typically involves a monthly phone contact or visit. Financial costs are ordinarily minimal.

PROGRAM IMPACT

Developer estimate. The program produces a consistent building-level approach to improvement, with shared goals, and increased staff commitment and cohesiveness. Staff interviews (Cleveland program) found clear impact in the majority of schools, with more mutual appreciation between administrators and teachers, and continued use of data to formulate goals. There is also increased student pride in work and acknowledgement of it by the school. The program does not appear to increase parent involvement.

Other evaluative data. Administrators describing program progress at the OASIS meetings report increased student achievement scores. At this point, KEDS staff prefer to be conservative about assigning causality to the program for such gains, but feel that impact has been noted. Longitudinal studies and/or an empirical study design are needed to determine causality.

MATERIALS AVAILABLE

Q& A: Frequently Asked Questions About Effective Schools, orientation brochure. (no charge)

Desegregation and Improving School Effectiveness (Videotape and Leader's Study Guide, 1981). (no charge for use; may be copied)

Effective Schools (Videotape). College of Education, Kent State University, 1981. (no charge for use; may be copied)

Newman, I., C. Newman, B. Porter, and E. Bard. 1982. Primer for the Effective Use of School Program Evaluation (no charge)

Correlates of effective schools (Slide/tape presentation) April 1984. Ohio Department of Education. (will be available for showings on a loan basis—no charge)

CONTACT FOR FURTHER INFORMATION

Dr. Benjamin Turner, Director, or Bernice Armour, Liaison and Program Office, Kent State Center for Educational Development and Strategic Services, Wright Hall, Kent State University, Kent, OH 44242. (216) 672-2828.

EFFECTIVE SCHOOLS PROGRAM

Ohio Department of Education
65 So. Front Street
Columbus, OH 43215

SPONSOR: Ohio Department of Education

OBJECTIVES/NEEDS ADDRESSED

The Effective Schools Program structure provides a better educational model for children with special needs (typically poor, disadvantaged, or minority) by developing a building-based approach to meet the specific needs of the children involved. The program's emphasis is on "product" —academic achievement for targeted groups—not just on "process."

USERS OF THE PROGRAM

The program is currently implemented in 60 Ohio districts, and it is almost evenly spread over large city, small city, suburban and rural districts. The majority of the communities' workforce is representatively blue-collar, with the exception of the suburban districts. The minority percentages range from 0 to 70 percent, mostly black, with a sizable Hispanic population. About 300 to 350 schools are involved: 70 percent elementary, 20 percent middle or junior high, and 10 percent high school (this figure is increasing).

Users who may be contacted for further information are:

William Anderson, Special Assistant to Superintendent, Columbus Public Schools, OH (614) 225-2646
Keith Rinehart, Principal, Burroughs Elementary School, Columbus, OH (614) 258-9523
James Marinelli, Principal, Caledonia Elementary School, Cleveland, OH (216) 451-1750
Zulfi Ahmad, Assistant Director, Planning & Development, Cincinnati City Schools, OH (513) 369-4090

PROGRAM OVERVIEW

Background. The Effective Schools Program was developed by the Department of Education under the leadership of Robert Evans, Assistant Superintendent of Public Instruction, and the Division of Equal Educational Opportunities staff. It began with six pilot districts in the 1981-82 school year. Development involved the ideas and research of Edmonds, the New York and Milwaukee School Improvement Program models, Rutter and Goodlad. More recently, it has been influenced by the research of Peters and Waterman (*In Search of Excellence*), and Sizer's study of high schools, *Horace's Compromise*.

The Department has encouraged growing use of the program through reports of the pilot districts and the summer training program for administrators, OASIS (Ohio Academy for School Improvement Strategies).

Procedures. The program's basic assumption is that working plans must be developed locally, at the building level, which utilize the following sequence.

Districts enter the program voluntarily. Building entry begins with staff discussion leading to agreement that addressable problems exist. A building team, led by the principal or staff members, is established and a needs assessment is conducted which is shared with the whole staff.

An action plan based on collegial decision-making is developed, specifying actions and responsibilities which are then carried out. Evaluation and reassessment lead to recycling for the following year, and ongoing problem resolutions. Ordinarily, 3 to 5 years of work are needed before the program can claim to have accomplished its objective (academic achievement for the targeted groups).

Assistance and resources available. The Ohio Department of Education sponsors two to five major state or regional conferences a year for administrators and central office personnel, using the conferences as the main stimulus for program initiation. One-week summer conferences, Ohio Academy for School Improvement Strategies (OASIS), for building administrators actively involved in effective schools programs, assist them in developing effective schools perspectives, planning, and reporting, for example.

Beyond these conferences, the Department staff provides occasional inservice training days for a district, and brief telephone or face-to-face consultation on current strategies. More time is given to larger districts or a consortia of smaller districts. The main emphasis is on helping districts develop their own programs. This may include the development of new internal assistance roles (for example, having a curriculum specialist for each building).

CONDITIONS REQUIRED FOR EFFECTIVE IMPLEMENTATION

Entry. Active interest of the superintendent and district central office staff is essential, along with building-level agreement that addressable problems exist, and that the program can effect change.

Operations. Since the emphasis is on local initiative, building-level energy and district office support are crucial. Program implementers *cannot* count on extended external support or standard materials. Building staffs need to establish their own guidelines for measuring success and establish ownership of the program; central office efforts to standardize, formalize or overly-control the process are unwise. The state department staff advises districts to track the progress of specific schools, getting pre- and post-data on attendance, discipline and achievement during the program. It is important for implementation to be concrete in terms of materials, school schedules, and specific activities.

FEATURES OF SPECIAL INTEREST

The administrator academies provide strong orientation to building principals, and a good background for program work.

The idea that the school should "control its own destiny" is central to the program, along with the idea that collegial decision-making will enable staffs to apply their own ingenuity, and achieve the rewards of success, including improved self-esteem. "It's hard work, but it's more satisfying than anonymity."

COSTS

Start-up. Time and dollar costs vary widely depending on the approach taken. The state department has proposed that the development and implementation of effective schools programs should not require additional funding but rather reallocation of existing funds. However, realistically, the district should provide additional funding for both pilot program development and start-up funding for new programs.

Operations. Once the program is under way, it is estimated to take 4 to 5 hours a week for building staff members to identify additional problems. How this is managed (through use of substitutes, or after-school meetings, for example) varies. In most cases, additional dollar funds are not required, but are reallocated for activities such as inservice work, visits to other districts, and summer curriculum development work.

PROGRAM IMPACT

Developer estimate. The majority of schools involved have demonstrated impact, including better attendance, reduced discipline problems, and improved academic achievement for the targeted groups.

Other evaluative data. An Education Commission of the States study of the State of Ohio Effective Schools Model demonstrated positive results in schools located in urban, rural and suburban settings, in the areas of increased instructional leadership of the principal; increased use of instructional strategies used by teachers; increased student academic learning in the basic skills area; and increased positive learning climate in the schools. Principals involved in the program are enthusiastic when asked to describe what meaningful changes have taken place in their buildings.

MATERIALS AVAILABLE

Effective Schools Program: ESP can help you see the future, brochure. (no charge)

Services Available to School Districts, brochure. Division of Equal Educational Opportunities, ODE. (no charge)

Ohio Building Leadership Model, brochure. (no charge)

Proceedings, Ohio Academy for School Improvement Strategies (OASIS). Issued annually, 1982, 1983; includes presentations, related articles, reports of implemented programs, etcetera. (no charge)

School Improvement Strategies: A Vehicle for Change. Conference Proceedings, Division of Equal Educational Opportunities, ODE 1983. (no charge)

Providing for disdvantaged youth. *Children First,* Spring 1984, 12(2). (no charge)

Mini-Journal, April 1984, 14(1). Articles on effective schools. Division of Equal Educational Opportunities, ODE. (no charge)

CONTACT FOR FURTHER INFORMATION

Robert W. Evans, Assistant Superintendent of Public Instruction, Ohio Department of Education, 65 So. Front Street, Columbus, OH 43215. (614) 466-5834.

Hazel Flowers, Director, Division of Equal Educational Opportunities, ODE. (614) 466-3318.

James Jilek, Coordinator, School Improvement Program, Division of Equal Educational Opportunities, ODE. (614) 466-3318.

ONWARD TO EXCELLENCE/GOAL BASED EDUCATION PROGRAM

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Northwest Regional Educational Laboratory (NWREL)
300 S. W. Sixth Aveneue
Portland, OR 97204

SPONSOR: Northwest Regional Educational Laboratory

OBJECTIVES/NEEDS ADDRESSED

The Onward to Excellence Program focuses on training leadership teams in schools to apply effective schools research and goal based management practices to local improvement efforts. Major goals are to improve student achievement, student behavior and overall school effectiveness, through a process of assessment, goal setting and action planning, and implementation and evaluation. The program seeks to build school-based planning and implementation capacity within local schools.

USERS OF THE PROGRAM

Onward to Excellence is in use in 11 districts (mostly suburban, some large/small city) in Oregon and Washington. There is a wide socioeconomic status range. Minority percentages range from 20 percent to less than 1 percent, with most schools having a relatively small percentage of minority students.

The program is in current use in 22 elementary, 4 junior high/middle and 10 high schools.

Users who may be contacted for further information are:

Jim Chatman, Principal, Lincoln High School, Tacoma, WA (206) 591-3800

Len Carpenter, Principal, Reynolds High School, Troutdale, OR (503) 667-3186

Dr. Steve Smith, Elementary Director, Lake Oswego School District, OR (503) 636-7691

Dr. Gay Selby, Assistant Superintendent, Kelso School District, WA (206) 577-2408

PROGRAM OVERVIEW

Background. Onward to Excellence was initiated in 1982 as an outgrowth of the Alaska Effective Schooling Project, which was a collaborative effort between NWREL and the Alaska Department of Education. The current program is based upon six sets of research findings: school and teacher effectiveness, curriculum alignment, program coupling, instructional leadership and organizational change studies. The National Institute of Education sponsored Onward to Excellence programs in six schools (all high schools). Additional districts and schools have contracted for training on an individual basis.

Procedures. Four "Onward to Excellence" workshops, spaced over a 12-month period, provide training for school leadership teams in all steps of the school improvement process. In Workshop 1, principals are introduced to effective schools research, program goals and participant responsibilities. Strategies for forming the school team are discussed.

Leadership teams (principal, and district and teacher representatives) receive continued training during Workshops 2, 3 and 4 to guide them in carrying out the 10-step improvement model. Teams learn how to compile comprehensive school profiles which examine student achievement, attendance and social behavior. School records and survey information collected at the local site are used in compiling assessment data. Profiles are analyzed, strengths and weaknesses identified, and improvement goals developed.

Teams examine lists of effective practices drawn from research (available in an NWREL publication), and determine which practices meet identified needs. These are incorporated in each school's improvement plan. Schools implement their plans and evaluate progress toward improved student performance before renewing their improvement effort for the next year.

Teams are responsible for ongoing communication with school staffs to share effectiveness research, and to obtain feedback regarding improvement goals and prescriptions. Inservice training, district/community support, and necessary resources are obtained and coordinated by team members. The process is a self-renewing one, as schools repeat the cycle after one implementation phase is completed.

Assistance and resources available. NWREL contracts provide for 5 full days of training (5 for principals, 4½ for teams), and up to 4 additional days of on-site technical assistance. Summaries of effective schooling practices and many NWREL resources are available to participants. The Goal Based Education Program provides a variety of related school improvement services and materials in addition to "Onward to Excellence": seminars for principals and district office staff on effective schooling; occasional papers on timely topics; and written descriptions of unusually successful schools.

Onward to Excellence workshops are available to districts/schools throughout the country.

CONDITIONS REQUIRED FOR EFFECTIVE IMPLEMENTATION

Entry. A district office representative is asked to join the leadership team and participate in training workshops. Also essential are principal commitment and staff interest in cooperative planning and implementation of school improvements aimed at increasing student achievement.

Operations. Necessary conditions are sustained commitment and willingness of teams to organize and manage all phases of the improvement process.

FEATURES OF SPECIAL INTEREST

Onward to Excellence is based upon a comprehensive synthesis of effective schools research. Teams learn to apply and utilize research in all phases of the process. The program supports training with technical assistance, and provides many opportunities for participants to "practice" new learnings. A team-building approach is emphasized, by creating local support groups to facilitate planning and implementation processes.

COSTS

Start-up. Contract costs vary depending upon number of schools/districts involved. Costs range from $5,000 plus travel expenses for one to four school teams (up to 24 participants), to $8,000 plus travel expenses for five to eight school teams (up to 48 participants). Multiple districts in a single geographic area can be accommodated with one contract.

Operations. Districts are responsible for substitute costs for teacher representatives. Time costs for principals total 5 full days of training. The program recommends that principals devote an additional 12 hours per year for various activities related to the planning process. Time costs for leadership team members total 4½ days, plus additional time (schedules vary) for school meetings and implementation tasks.

PROGRAM IMPACT

Developer estimate. The greatest impact has been seen in high schools. Of the eight schools starting in the fall of 1982 or the spring of 1983 (all high schools), five have completed one improvement cycle. Three improved attendance, one improved writing performance and one improved assessment procedures. Two of the eight dropped out of the effort, and one was completing the profile of the student performance at this writing. Of the five that completed an improvement cycle, all have renewed their efforts. One is concentrating on improving reading achievement, two are concentrating on improving general achievement, one is focusing on homework, and one is working to improve curriculum. The schools that started in the spring of 1984 finalized goals and plans for implementation in fall 1984.

It is too early to judge impact for the elementary schools participating.

Other evaluative data. Interviews with team members were conducted to determine the effectiveness of the team management concept. Results are currently being compiled.

MATERIALS AVAILABLE

Using R&D to Improve Schools. Goal Based Education Program, June 1983. (no charge)

Onward to Excellence program description. (no charge)

Effective Schooling Practices: A Research Synthesis. Goal Based Education Program, April 1984. (single copies, $2.75; 10 copies, $17.50, 50 copies, $57.50)

Effective Practices Resource List. (no charge)

Training materials. (available only to *Onward to Excellence* participants)

Occasional papers: (available through ERIC)

- Improving Instructional Management with Micro-Computers. December 1981. (ED 225-557)
- High School Science Programs: Managing for Excellence. (Submitted to ERIC in fall 1984)

CONTACT FOR FURTHER INFORMATION

Dr. Robert E. Blum, Director, Goal Based Education Program, Northwest Regional Educational Laboratory, 300 S.W. Sixth Avenue, Portland, OR 97204. Phone from within Oregon: (503) 248-6800; phone from all other states: (800) 547-6339.

PRINCIPALS AS INSTRUCTIONAL LEADERS

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Northwest Regional Educational Laboratory (NWREL)
300 S.W. Sixth Avenue
Portland, OR 97204

SPONSOR: Northwest Regional Educational Laboratory

OBJECTIVES/NEEDS ADDRESSED

The purpose of this administrative training program is to increase principals' knowledge, skills, and experiences in curriculum, leadership, organizational development (OD), management and long-range planning. A secondary goal is to initiate a school self-planning and improvement process, facilitated by the principal. Involvement of principals in designing and revising training programs is a primary focus.

USERS OF THE PROGRAM

The program is in current use in nine districts, representing a large geographical area in the Pacific and Northwest (Oregon, Alaska, Hawaii, Micronesia, Northern Mariana Islands). The socioeconomic status range is wide, as are the minority percentages, which range from 5 to 70 percent (black, Asian, Polynesian, Micronesian).

Principals of 70 schools, two thirds elementary, with the rest comprised equally of middle/junior high and high schools, are participating in the program.

Users who may be contacted for further information are:

Denny Chamberlain, Deputy Superintendent, North Clackamas School District, Milwaukee, OR (503) 653-3600

Dr. Kiyoto Mizuba, District Superintendent, Hawaii District, Hilo, HI (808) 961-7237

Lokelani Lindsey, District Superintendent of Maui, Wailuku, HI (808) 244-4221

Henry Sablan, Superintendent, Northern Mariana Islands School District, Saipan, CM, No. 9812.

PROGRAM OVERVIEW

Background. The instructional leadership program was developed in 1980, following extensive research and development work at NWREL. Training materials from the Dissemination Support Service (R&D Exchange) were used in design and development stages. The research base includes effective school literature (Edmonds, Brookover, Lezotte), effective teaching (Hunter, Stallings), and organizational development (Miles, Hall and Loucks, Fullan, Lippitt).

Procedures. Districts enter voluntarily, after initial consultation with NWREL consultants. A cadre planning group (principals/key district staff) is formed to diagnose the group's needs, examine district/state goals, and design a long-range (2 to 3 years) personalized training program. The focus is on growth/change at three levels: district, school, and personal growth of individual principals.

Training activities alternate from off-site experiences (learn, examine, analyze, refine, share) to on-site "practice," when principals apply knowledge and skills learned at their own schools. An initial 2-day retreat focuses on techniques of assessment, and a review of related research. Principals administer assessment instruments at their schools, and return to the off-site location to discuss/share results. Additional sessions provide principals with many opportunities to "learn—share—go back and apply," as they practice skills in schools. There are five basic elements covered during training: (1) sharing successes, (2) skill building, (3) information giving, (4) problem solving, and (5) action planning for local school improvement. Principals have an active role in supporting colleagues, designing training activities, and evaluating personal/school/district growth.

The process is a long-range effort (2 to 3) years, with the first year devoted to planning, assessment, and training; and the second to building district/school capacity to "own" the program.

Assistance and resources available. Program consultants provide guidance/support in designing training activities, adapting relevant research to each unique setting, and assisting principals with in-school implementation. Consultants work with each group 30 days per year, and meet with individual principals when requested. Participants have access to national information data bases, NWREL resources, and program materials developed to accompany training programs. Some district/states provide a local consultant to follow up on training sessions, and offer ongoing support.

CONDITIONS REQUIRED FOR EFFECTIVE IMPLEMENTATION

Entry. Essential conditions include district/state commitment to allocate/reallocate time and money to support on-site implementation; readiness for change and commitment to growth on the three levels (school, district, personal); and interest in, and commitment to, program goals from the policy/management level.

Operations. Needed here are willingness of the principal and school staff to support risk-taking and experimentation, to self-diagnose and examine, and to make changes in school policies, procedures, and programs. "There must be a willingness to *build*, rather than to take and install."

FEATURES OF SPECIAL INTEREST

Training activities are custom-tailored, to meet the needs of each group of principals. The process is a long-range effort, providing sufficient time for extensive self-diagnosis, planning and training. The program is participatory at all levels, involving principals in the design and operation of the training, and district/state personnel and teachers during

change activities at the school site. Such broad-based involvement enables change to occur at the management and policy levels, as well as at the local school site. Principals who have participated in the leadership program often become consultants to other districts, through a growing resource-sharing network.

COSTS

Start-up. Time costs for initial planning sessions total 1 to 2 days. District participation in initial activities is required.

Operations. Groups meet every 2 months for 2 to 3 day sessions, and must also devote substantial time to practice/implementation at the school site. On-site time costs depend on how fully principals integrate activities into the foci of the school. A core group of planners ("macro planning group") meets four times a year (half days) to review total program development and make recommendations.

Typical consultant costs for 1 year's work, covering training (30 days), individual support, and resource materials come to $8,000 plus travel expense.

PROGRAM IMPACT

Developer estimate. The program has resulted in growth of individual principals in several areas: conducting effective meetings; identifying and making expectations clear to staff; modeling effective instruction; coaching of teachers; and improving management skills. "Training has helped principals talk and live instruction."

Organizational growth (within schools) has occurred through the focus on school-based improvement. Changes in district/state level policies have been an outgrowth of cooperative training activities. Increases in student achievement have been directly attributable to the program. Many principals have become skilled instructional leaders, who now conduct training sessions for other administrators.

Other evaluative data. Personal inventories/interviews and workshop evaluations are utilized to assess the effectiveness of training programs, and revise program objectives. These data sources show participant growth in three different spheres: self, training group, and organization. Typical changes include increased trust, openness, shared leadership, and inter-organizational collaboration. Members of training groups often support each other in launching and carrying out new change activities.

MATERIALS AVAILABLE

Proceedings of training sessions (minutes, documentation, instruments, handouts) 1982, 1983, 1984. (available to program participants and district decision-makers)

Bibliography of NWREL Training Materials Collection, 1984. Covers management, organization development, curriculum planning, instructional strategies, futures/trends. (available on request, no charge)

Products Catalog, NWREL. (no charge)

Instruments and training materials (see catalog):

- RUPS (Research Utilizing Problem-Solving) ERIC ED 211 536
- PETC (Preparing Educational Training Consultants): *Part 1,* Instructional Strategies ($10.50), collection of exercises ($42.00); *Part 2,* Group Process Skills, Instructional Strategies ($7.80), added handouts ($11.00); *Part 3,* Organization Development, Instructional Strategies ($6.75), participant materials, ERIC ED 144 193, Organization Development in Education, a Resource Text ($8.80).
- Interpersonal Influence. ERIC ED 121 749.
- Interpersonal Communication. ERIC ED 095 127.

Effective Schooling resource materials are also available through NWREL's Onward to Excellence program.

CONTACT FOR FURTHER INFORMATION

Dr. Joseph Pascarelli, Director, Principals As Instructional Leaders, Northwest Regional Educational Laboratory, 300 S.W. Sixth Avenue, Portland, OR 97204. (800) 547-6339.

REPLICATING SUCCESS

Philadelphia Public Schools
21st Street and Parkway
Philadelphia, PA 19103

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SPONSOR: Philadelphia Public Schools

OBJECTIVES/NEEDS ADDRESSED

The ultimate aim of Replicating Success is to maximize student achievement by helping schools adopt a belief system that all students could be achieving at grade level or above, and that it is the school's responsibility to bring this about. The emphasis is on helping staff members believe and behave in ways that reflect high expectations for all students. The program provides a framework for school renewal through assessment, goal-setting, in-depth staff training and evaluation. Additional goals are improvement in student attendance, decrease in student drop-out rate (secondary), improvement of student attitudes, and provision of a balanced curriculum for all students.

USERS OF THE PROGRAM

The program operates in one urban Philadelphia district. Twenty-eight elementary schools and two junior high schools are participating. The socioeconomic level is blue-collar/unskilled. Black and Hispanic students number approximately 90 percent.

Users who may be contacted for further information are:

Dante Lombardi, Principal, Willard Elementary School, Emerald & Orleans, Philadelphia, PA (215) 739-6812

Judy Lehman, Principal, Washington Elementary School, 5th & Federal Streets, Philadelphia, PA (215) 803-0129

Richard Phipps, Principal, Heston Elementary School, 54th & Lancaster, Philadelphia, PA (215) 879-1750

PROGRAM OVERVIEW

Background. Replicating Success was an outgrowth of an earlier Philadelphia effort, the Affective Education—Expectation Project. Its purposes were to understand how expectations were being conveyed to students, share this information with staffs, and design a program to raise expectation levels. The project's activities aimed to change staff attitudes and practices, as well as the social milieu of the school which strongly influenced expectation factors.

Supported by a William Penn grant, Replicating Success was initiated by the Philadelphia Superintendent of Schools in 1983. Effective schools research (Edmonds) was used in development stages. The implementation model was adapted from the Affective Education project.

Procedures. Local superintendents may recommend schools for inclusion in the program. Selection must be from a "priority one" list which identifies low achieving, racially isolated schools. Expressed interest of the principal and staff is also necessary. Following an initial school presentation for staff, a decision regarding participation and commitment to program objectives is made. Although the process varies from school to school, there are three basic steps: needs assessment, planning and implementation. A schoolwide assessment process includes (1) interviews with staff to assess strengths, weaknesses and expectations levels, (2) a climate survey, and (3) review of achievement, attendance and socio-economic status data. Staff members analyze results and begin to set goals. A School Improvement Council meets monthly to investigate resources and develop plans.

In an "Expanding Horizons" phase, successful programs that meet identified needs are presented, Subcommittees are encouraged to explore options, investigate resources and identify programs for possible adoption. A plan, developed by the subcommittees and the School Council, is submitted for principal/staff approval.

During the implementation stage, consultants conduct staff training to facilitate plan implementation.

Assistance and resources available. Eight Academic Facilitators work closely with the principal, School Council and staff to carry out all phases of the program. Facilitators spend approximately 2 days per week in participating schools. Their responsibilities include conducting the needs assessment; meeting with principals, subcommittees and school councils to update progress and provide technical assistance; coordinating training activities; and working with resource specialists to plan implementation activities. The program provides each school with a $10,000 stipend for staff development efforts carried out during a 3-year period.

The program is limited to Philadelphia schools, but the support staff is willing to supply advice regarding adaptation elsewhere.

CONDITIONS REQUIRED FOR EFFECTIVE IMPLEMENTATION

Entry. Commitment to participate on planning committees and attend inservice sessions is required of principal/staff. Teachers' willingness to be observed by program staff during the assessment process is necessary. Replicating Success looks for schools where it can complement existing programs and become internalized as a system-wide approach.

Operations. The program requires sustained commitment to the process, and willingness to investigate and identify programs and resources to meet school needs. Principals and resource teachers must be willing to monitor, at least four times a year, the progress students are making.

FEATURES OF SPECIAL INTEREST

Replicating Success is a "labor-intensive" program. The

presence and work of the Academic Facilitators are crucial to positive implementation efforts. The strong emphasis on expectation levels within schools focuses staff on recognizing student achievement and raising standards. The program advocates a systems approach to school improvement. "We're not a special project, but one which becomes internalized within a school. Our philosophy is that the whole is greater than the sum of its parts." The program also requires school personnel to communicate expectations to parents concerning what is to be learned, and specifically how well their child is doing.

COSTS

Start-up. Time costs for teachers include a half-hour interview, completion of a climate survey, and classroom observations. School Improvement Council (SIC) members agree to join the committee for 2 consecutive years, and meet at least once a month, either before/after school or during lunchtime.

Operations. Most members of the staff agree to attend staff development sessions. Time costs for staff include regular participation during subcommittee work and faculty staff meeting discussions. The principal is asked to devote 1 hour of faculty meeting time per month to program activities.

There are no dollar costs to Philadelphia schools participating in Replicating Success.

PROGRAM IMPACT

Developer estimate. Program activities have resulted in improved staff communication, greater focus on instructional leadership by principals and increased goal setting that provides "road maps" for all staff to follow. Staff expectations have increased through inservice training and development of procedures for monitoring student progress by principals and teachers. One successful innovation is a "test-up day," held in the middle of the year. All students are tested to see if they can move up to the next instructional level.

Other evaluative data. Schools in the earlier Affective Education project showed substantial increases in reading and math achievement scores (20 to 60 percent). Evaluative data on the current project are being compiled.

MATERIALS AVAILABLE

Program description. (no charge)
Guidelines for Needs Assessment and School Improvement Council. (no charge)
Ideabook for School-wide Student Recognition Systems. (no charge)

CONTACT FOR FURTHER INFORMATION

Dr. Earlene Sloan, Director, Replicating Success, Philadelphia Public Schools, Room 406, 21st and Parkway, Philadelphia, PA 19103. (215) 299-3641.
Henry Kopple, Assistant Director, Replicating Success, Philadelphia Public Schools, Room 406. (215) 299-3640.

SCHOOL IMPROVEMENT PROGRAM (SIP)

Pittsburgh Public Schools
West Liberty Training Center
Dunster and La Moine Streets
Pittsburgh, PA 15226

SPONSOR: Pittsburgh Public Schools

OBJECTIVES/NEEDS ADDRESSED

The purpose of SIP is to help schools utilize a problem-solving process for identifying needs and implementing improvement projects. A major goal is to fuse district-wide priorities/programs with local school improvement efforts. SIP's emphasis is on improving student achievement, increasing effectiveness of individual elementary schools at the building level, and developing a process model which can be replicated in all Pittsburgh schools.

USERS OF THE PROGRAM

The program is in current use in seven Pittsburgh elementary schools (public/urban). There is a wide socioeconomic status range throughout the district. Minority percentages range from 60 to 95 percent black.

Users who may be contacted for further information are:

Dr. Joseph Hightire, Principal, Fort Pitt Elementary School, Pittsburgh, PA (412) 661-0435

Johnny Jiggetts, Principal, Philip Murray Elementary School, Pittsburgh, PA (412) 381-7075

PROGRAM OVERVIEW

Background. In February 1981, in response to a district-wide needs assessment survey conducted by the Learning Research and Development Center (Cooley, Bickel, 1980), the Board of Education adopted the Pittsburgh School Improvement Program. Objectives/guidelines linked to district-wide goals were developed by the Pittsburgh Public Schools in collaboration with the University of Pittsburgh. The research base includes effective schools literature (Edmonds, Brookover, Lezotte), and effective teaching (Hunter). The current program began in 1981.

Procedures. All seven schools selected for participation in the School Improvement Program fell below national norms in reading, math and language skills.

An orientation phase acquaints participants with district-wide priorities and effective schools research. Schools receive a multi-dimensional Data Resource Bank (instructional and demographic profile), and carry out a needs assessment process. Program staff analyze data, identify priorities, and plan staff/parent training to meet school needs.

A steering committee (advisory body) reviews profile data, and plans for corrective action. The advisory team and a number of school improvement committees are responsible for continued planning, identification of resources, implementation, reevaluation, maintenance, and program assessment.

A "Wave II" District Action Plan for School Improvement (1984-85) will involve additional elementary schools, and focus on five external initiatives: (1) an Academic Monitoring System; (2) a Multi-Team Staffing System to assess/plan for low achieving students identified with the Monitoring approach; (3) use of a Pacing Profile to help principals/teachers project movement of students through the curriculum; (4) a Discipline Improvement model; and (5) a Systematic Instructional Parenting Program (two week course for parents focusing on communicating high expectations, values clarification, monitoring of student progress, homework, stress management, and effective parenting).

The Wave II initiatives will use 17 comprehensive entry criteria; scores on these will enable design of a specific inservice/staff development program, matched to the building's profile and the administrator's style. Similar exit criteria will be used to guide decisions about maintenance and phasing out of schools from the program.

The time line for a typical school improvement effort encompasses 3 to 5 years.

Assistance and resources available. Field-based program supervisors visit schools weekly, attend all committee meetings, and offer advisory/resource support. The LRDC (Learning Resource Development Center) at the University of Pittsburgh offers technical assistance in data analysis/student evaluation, and shares information about effective schools work throughout the country. Program staff coordinate inservice, organize monthly principals' meetings, and provide progress/planning/referral forms for submission to the SIP director. All materials necessary to implement "Wave II" initiatives will be made available to SIP schools.

The program is limited to Pittsburgh schools, but the support staff is willing to supply advice regarding replication.

CONDITIONS REQUIRED FOR EFFECTIVE IMPLEMENTATION

Entry. The needed conditions are the school's belief in collaborative planning and ownership of improvement efforts; administrative cooperation and support; and credibility of SIP staff.

Operations. The program requires commitment of the steering and school improvement committees to meet, supervise, and monitor the program, along with willingness of staff/principal to participate in self-examination. Teachers must see an immediate link of effective schools research and SIP efforts to their own classrooms/school programs.

FEATURES OF SPECIAL INTEREST

The School Improvement Program attempts to forge instructional consensus around specific program goals/strategies for increasing the effectiveness of individual schools by: (1) fusing a clinical analysis approach with the characteristics of effective schools; and (2) using school-level data with implementation and change theory.

The program offers a strong staff development component based on building-level needs. SIP also applies effective schools research and external initiatives in altering the behavior of educators relative to daily routines and practices, to assure greater academic output at the classroom level.

SIP emphasizes collaborative principal/supervisory decision-making for the effective delivery of support services; the intent is to focus on critical areas of instructional need, and selected teachers as participants.

The goal of strong instructional leadership is linked to the use of school-level data, to staff/principal planning sessions, and to periodic progress reports based on minimum competencies for ongoing evaluation of general goals.

COSTS

Start-up. Time costs for orientation sessions total 10 hours for principals, and 30 hours for staff. Fifteen hours are required for completion of needs assessment surveys.

Operations. Time costs for steering/school improvement committees total approximately two after-school meetings per month, beginning in the second term. Principals attend six half-day cluster meetings each year. Inservice training (2 full days per year) occurs during scheduled staff development time (school based). Additional training activities during/after school hours are planned at each site. Time costs will increase during Wave II, with implementation of new initiatives.

There are no dollar costs to SIP schools for implementing the process. Schools may decide to reallocate existing instructional funds to support plan activities.

PROGRAM IMPACT

Developer estimate. The program has resulted in increased principal effectiveness, reduction in discipline with an increase in time on task, greater collaborative planning and greater parental involvement. Impact has been seen in increased achievement in basic skills and heightened expectations, greater corrective remediation of individual students and sustained maintenance of program goals.

The number of "overaged students" (not promoted), has decreased dramatically. Prior to SIP involvement, many students were retained; at present, there are no overaged students in SIP schools. The number of special education referrals/placements has also shown a marked decrease.

Other evaluative data. All seven SIP schools have moved above national norms in basic subject area achievement tests, to reach the 65th percentile in reading, math and language. Evaluation questionnaires revealed that teachers saw the steering committee as the most effective process for initiating school-based change.

MATERIALS AVAILABLE

The School Improvement Program: A Plan for Increasing the Effectiveness of Individual Elementary Schools. Pittsburgh Public Schools, 1981.

Wave II—A Plan for Increasing the Effectiveness of Individual Elementary Schools. Pittsburgh Public Schools, 1984.

School Improvement Program: Student Management, An Alternative Approach to Discipline. Pittsburgh Public Schools, 1984.

Monitoring System Pacing Sheet.

Principal Planning form.

Progress summary report forms.

Venson, L. A Plan for Increasing the Effectiveness of Individual Elementary Schools. Paper presented at AERA meeting, Montreal, 1983.

(All materials are available at no charge. Individuals requesting materials must pay postage.)

CONTACT FOR FURTHER INFORMATION

Dr. Louis Venson, Director, School Improvement Program, Pittsburgh Public Schools, West Library Training Center, Dunster and La Moine Streets, Pittsburgh, PA 15226. (412) 344-0218.

ACHIEVEMENT DIRECTED LEADERSHIP

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Research for Better Schools, Inc. (RBS)
444 North Third Street
Philadelphia, PA 19123

SPONSOR: Research for Better Schools

OBJECTIVES/NEEDS ADDRESSED

Achievement Directed Leadership (ADL) focuses on helping central office staff and principals use research knowledge to help teachers improve basic skills instruction and student achievement in elementary schools. This staff development component builds district and school capabilities to sustain ADL in their organizations, and promotes better use of existing personnel, resources and programs.

USERS OF THE PROGRAM

Over the past 7 years, Research for Better Schools, a regional educational laboratory, has developed and tested ADL, and is now exploring ways to promote the ADL approach through state-supported turnkey training institutes. To date, the lab estimates that it has provided orientation workshops to 23 intermediate service agencies in New Jersey, Delaware and Pennsylvania; 15 of these agencies also received training in at least one ADL component.

One hundred fifty local school districts participated in orientation activities, with 60 continuing in some part of the training. Most districts are rural or suburban; a few are urban. Minority percentages are not large. Between 300 and 500 schools, mostly elementary, have been involved. Much of the more effective work has been done with high-need school districts which are strongly committed to improving student achievement.

RBS has also provided awareness sessions and in-depth training to educators outside the immediate region, including members of the Connecticut State Department of Education, the East Alabama Regional Educational Center, and the Bayonne School District in Texas. The project is funded by the National Institute of Education. (No official endorsement by NIE should be inferred.)

Users who may be contacted for further information are:

Dr. Ronald Larkin, Superintendent, New Brunswick Schools, New Brunswick, NJ (201) 745-5414
Dr. Robert LaFrankie, Superintendent, Bethlehem Area District, Bethlehem, PA (215) 861-0500
Dr. Theodore Haig, Deputy Superintendent, East Orange District, East Orange, NJ (201) 266-5615

PROGRAM OVERVIEW

Background. Variables linked to student basic skills achievement were identified from classroom effectiveness research (such as Stallings and Kaskowitz; Cooley and Leinhardt; Fisher, Marliave and Filby). Studies on implementing school change and inservice programs, including those by Berman and McLaughlin, Fincus and Williams, and Joyce and Showers, were utilized in developing the ADL model. Districts in Delaware, New Jersey and Pennsylvania cooperated in developing the program with RBS. The current ADL model was field tested in the 1981-82 school year.

Procedures. The ADL program has four main elements: (1) a focus set of classroom, school and district variables especially important to basic skills instruction; (2) a variable management strategy, or "improvement cycle" to assist teachers and principals in assessing instructional needs and planning improvements; (3) a method of coordinating and focusing improvement efforts across the district, called the "leadership plan"; and (4) a staff development program which provides the training necessary for installation and maintenance of the leadership plan.

An orientation session informs prospective users about the four main elements of ADL. The staff development program provides district leaders, principals, and teachers with long-term intensive training through a series of workshops. Training follows a turnkey model: outside linkers train the district leadership (frequently some or all principals are included in this training), district leaders train principals, and principals train teachers. Outside linkers continue to provide technical assistance upon request. Awareness, training, and initial implementation can be completed during one year, although the process can be spread, with good effect, over a longer time span.

ADL has two major training components, Content Management and Time Management. In their training in these two components, educators learn to use the "improvement cycle" to focus on the four major classroom variables that are especially important to basic skills achievement: a) student prior learning which aids them in understanding new subject matter; b) coverage of criterion-relevant content, that is, learning content which will be tested. c) academic performance, that is, success with daily learning tasks, mastery of curriculum units, and periodic review; and d) student engaged time.

Teachers use the improvement cycle to evaluate their current success on these variables compared to that in other classrooms, to plan and implement improvement strategies, and to evaluate their efforts.

The Content Management component provides training in using the improvement cycle to monitor and manage prior learning, coverage of criterion content, daily success, unit mastery, and periodic review. The second com-

ponent, Time Management, provides training in using the improvement cycle to assess and improve student engaged time.

Assistance and resources available. ADL offers a 1-day orientation session. District-level training (for central office staff and often principals) includes three implementation workshops: Managing Instructional Time, Managing Instructional Content, and Participatory Supervision. Workshops range from one-half to three days. The workshops emphasize use of the four focus variables and include attention to planning for implementation and turnkey training.

Formal workshops for teachers require less time than the district-level sessions: one 40-minute orientation, 3 hours for Managing Instructional Time, and 6 to 9 hours for Managing Instructional Content. Workshop packets, handbooks and videotapes are available. District staff are urged to conduct monthly instructional leadership seminars for principals to discuss program implementation and collaborate in problem solving.

CONDITIONS REQUIRED FOR EFFECTIVE IMPLEMENTATION

Entry. There must be attendance at an orientation session prior to a decision regarding implementation.

Operations. It is recommended that ADL be implemented district-wide, beginning with workshops for district leaders. It is essential to have district commitment to turnkey training and following through with implementation.

Individual schools or teachers may derive some of the benefits of the program from implementation at the building or classroom levels. Separate versions of the training materials are available for use in these situations.

FEATURES OF SPECIAL INTEREST

A strong research base supports the ADL design. The focus is on classroom variables for which educators learn to collect data and make judgments on adequacy of implementation. The cooperative involvement of teachers, principal, and district office staff leads to greater communication at all levels. The emphasis is on building capacity at the district level for widespread training and dissemination.

COSTS

Start-up. The 1-day orientation presentation costs $300 plus travel costs and expenses.

Operations. District training packages range in price from $210 (3-hour workshop) to $1,045 (three 5-hour days). Travel time and expenses are added to training costs. A variety of training options and additional technical assistance can be purchased. Training materials vary in price with the workshops selected and the format of videotapes (U-matic, VHS, Beta). Following training, the implementation process can be carried out within a district's normal operating budget.

PROGRAM IMPACT

Developer estimate. As a result of ADL, teachers give more attention to student variables in their classrooms, and principals become more active observers. The program is said to improve district-wide communication. Principals report that they get into classrooms more often, have more productive conferences with teachers, and provide more relevant inservice and support for staff. Central office leaders have indicated that they monitor and support principals more effectively.

Other evaluative data. According to data collected in the 1981-82 field test of ADL, implementation of the program is positively related to gains in student achievement. Students in schools that were new to the program, and that implemented the program well, showed impressive increases on year-end standardized achievement tests. Schools that had implemented program methods for several years and that already had relatively high scores, were able to maintain the scores at the same level with continued implementation.

MATERIALS AVAILABLE

Achievement Directed Leadership Program Description. (no charge)

RBS Newsletter (Special Edition) ADL: Sharing School Improvement Experiences, 1984. (no charge)

Orientation materials: Orientation packet. ($3.50); Videotapes. ($25 to $35);

Managing Instructional Time materials: Workshop packets for districtwide implementation (central office staff, principal and teacher levels) ($60.50); Videotapes (costs vary with tape format, ($40.00-$80.00 per tape).

Managing Instructional Content Materials: Workshop packet for districtwide implementation (central office staff, principal and teacher levels) $44.50); Videotapes (costs vary with tape format), ($40.00-$60.00 per tape).

Handbooks for districtwide implementation. ($19.50)

(Prices as of September 1984 may be subject to change. The materials are available to all interested educators, but the workshop packets are designed for use by trained presenters. Prospective buyers are urged to base their decision to buy on at least one orientation session. Districts who want to implement ADL are urged to buy a master set of materials from which they can make duplicates.)

CONTACT FOR FURTHER INFORMATION

Dr. David Helms, Director, Achievement Directed Leadership, Basic Skills Component, Research for Better Schools, 444 North Third Street, Philadelphia, PA 19123. (215) 574-9300.

SCHOOL EFFECTIVENESS TRAINING PROGRAM

Research for Better Schools
444 North Third Street
Philadelphia, PA 19123

SPONSORS: Research for Better Schools, New Jersey Education Association, and Pennsylvania State Education Association

OBJECTIVES/NEEDS ADDRESSED

The School Effectiveness Training Program aims to mobilize and direct energies within elementary and middle-school faculties, to overcome isolation and fragmentation, to reconstruct a collective sense of responsibility for the school, and to improve organizational effectiveness as measured by achievement, attendance, participation and discipline. Five basic areas are dealt with: instructional leadership; climate (in a broad, quality-of-work-life sense); standards, expectations and assessment; the mission of the school; and academic/curricular emphasis.

USERS OF THE PROGRAM

The program is in current use in six New Jersey and two Pennsylvania districts, mostly smaller cities; a large city, a suburban and a rural district are also included. The socio-economic status is mostly blue-collar/unskilled, with some middle class. The percentage of minority students (black and Hispanic) is usually about 50 percent, with a range of 2 to 80 percent.

Altogether, 19 schools are involved, including 6 middle or junior high and 13 elementary schools. An additional 10 sites are beginning program activities in the fall of 1984.

Users who may be contacted for further information are:

Marven Hill, Principal, New Jersey Avenue School, Atlantic City, NJ (609) 345-1821

Charles Brown, Teacher, PS 14, Jersey City, NJ (201) 547-5968

Dr. Richard Cahn, Superintendent, Reading School District, PA (215) 371-5612

PROGRAM OVERVIEW

Background. The program was launched by the New Jersey Education Association's Urban Education Committee, in collaboration with Research for Better Schools (RBS). State education agency (SEA) pressure for accountability was a contributing factor. Using ideas of Edmonds, a pilot program was begun in one district in the spring of 1980. The program was substantially redesigned by RBS in the fall of 1980, using material from Brookover, Lezotte, Epstein, Purkey, problem-solving training, quality of work life programs (QWL) and some organization development work. The redesigned program was implemented in five districts by the fall of 1982.

Procedures. Program participation can be initiated in a variety of ways: by a superintendent, by a teacher union field representative, by local union leadership, or by a building faculty. There are discussions involving all these levels and the local board before agreement to proceed is reached; an initial orientation meeting is provided to help. The local union leadership's and/or building faculty's decision to proceed is essential. (A formal agreement procedure was being revised for use in the 1984-85 school year.)

A district-level Coordinating Council is created (in locations where SET Programs are implemented throughout the entire district), along with a building-level Coordinating Council of 11 to 15 members for each school involved, preferably by election. After orientation of the building council and election of a chair, it conducts a survey of climate (the RBS School Assessment Survey) and sometimes a school profile description. The council reviews the data and plans a staff retreat or "institute." The time line for this is about 3 to 6 months.

The retreat (12 hours), is typically 2 days (or 3 half-days), either on or off site. Assistance is provided by members of a specially-trained cadre of NJEA or PSEA personnel, and by RBS staff. The building staff analyze the data, identify problems, and agree on priorities. These results are used by the council for planning next steps.

The implementation of plans then proceeds, with use of temporary task forces involving council members and other faculty members. Usually two to three change efforts are carried out in parallel.

There is annual year-end review, evaluation, and resetting of priorities and plans.

Assistance and resources available. Program staff (and NJEA/PSEA trainers) aid with preliminary orientation and the decision to proceed; orient the councils at district and building levels; conduct the retreat (there is a well-developed Program Manual); and provide about 1 day a week of follow-up support during the first 6 months of work (regular attendance at council meetings for example). NJEA is developing an additional group of district-level consultants for continuing support.

CONDITIONS REQUIRED FOR EFFECTIVE IMPLEMENTATION

Entry. The program is presently operating only in New Jesey and Pennsylvania. In other states, the active involvement of an NEA affiliate would be required.

Districts that intend to spread the program across many schools are a "better bet," and receive priority from program staff, since assistance resources are limited. Thorough, multi-level participation in the decision to start is important, to move past board and administrator suspicion about the union's role. Ideally, the process should be initiated no later

than the fall, with the retreat occurring no later than March, "otherwise everything has to be redone."

Operations. Principals must learn to overcome their anxiety about participatory planning and management. Their leadership and support is crucial. It is also important for teachers to identify educationally significant problems, and move in their planning from the school level to the problems of classroom instruction. Active functioning of a district council helps sustain and extend the work.

FEATURES OF SPECIAL INTEREST

The strong participation of teacher union members at the state and local levels engenders teacher ownership, and, through the cadre of trainers, makes the program more self-sustaining. Emphasis on district as well as building-level councils also encourages local administrator-union policy-making, problem-solving and institutionalization. The program relies on local "empowerment," and typically produces a durable structure (the councils) that remains in place as a forum for professional discussion and planning.

COSTS

Start-up. Initial council meetings (usually two or three) require substitutes. Costs for the retreat (12 hours of work time, over 2 to 3 days, typically with a Saturday contributed by staff) vary widely (from a single meal to full hotel accommodations). There are no dollar costs for assistance provided. Costs for the School Assessment Survey instrument vary depending on the number of teachers in the school.

Operations. The district and building council typically meet monthly, although both usually meet more frequently during the initial implementation stage. Dollar costs vary widely, from very little to substantial, depending, for example, on whether summer support is provided for program-related work, or whether normal inservice funds are turned over to the council for its use.

PROGRAM IMPACT

Developer estimate. The program increases staff morale, and leads to much staff discretionary effort (of the "above and beyond the call of duty" kind). It improves staff-administrator relationships, especially in longer-term efforts with good district support. These effects appear in two-thirds to three-fourths of schools. A major outcome is the maintenance of the Council structure, which has occurred in *all* sites using the program since the fall of 1982. School cultures have changed in a more professionalized direction. Some districts have reported improved management-labor relations (strike resolution, faster contract negotiation.)

At the programmatic level, districts report improved attendance, discipline, better school-home communication, student recognition and reward programs, and greater goal consensus.

Other evaluative data. Documentation by Dawson (1983) found that program participants have developed plans to increase school effectiveness and have implemented a variety of activities.

MATERIALS AVAILABLE

School Effectiveness Training Program Manual. (no charge)

School Assessment Survey, includes survey instrument, data analysis, and graphic profile. ($4 to $5)

School Assessment Survey: An Introductory Guide. Wilson, B.L., W.A. Firestone and R.E. Herriott, RBS Field Studies Component, November 1983; revised version summer 1984.

A Report of the School Effectiveness Training/High School Development Program. Dawson, J.A. RBS Field Studies Component, December 1983. ($2.50)

This Was No Accident? SET. Decision Making at the Building Level. *Voice*, May 14, 19[illegible] Pennsylvania State Education Association. (no charge)

Woods, M.A. and R.L. Houston. August 1982. The 1982-83 Follow-up Plan. (no charge)

CONTACT FOR FURTHER INFORMATION

Thomas Corcoran, Program Director, Research for Better Schools, 444 North Third Street, Philadelphia, PA 19123. (215) 574-9300.

Donald McNeely, New Jersey Education Association, 180 W. State Street, P.O. Box 1211, Trenton, NJ 08607. (609) 599-4561.

Dr. William Gaskins, Pennsylvania State Education Association, 400 North 3rd Street, Harrisburg, PA 17105. (717) 255-7108.

SECONDARY SCHOOL DEVELOPMENT PROGRAM

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Urban Development Program, Research for Better Schools
444 North Third Street
Philadelphia, PA 19123

SPONSORS: Research for Better Schools, New Jersey Education Association, and Pennsylvania State Education Association

OBJECTIVES/NEEDS ADDRESSED

The Secondary School Development Program aims to improve high school effectiveness, including student achievement, retention, attendance, student behavior, and student placement past high school. The intermediate goals are to improve the quality of work life for staff and students, by strengthening the school's capacity for coordination, planning, evaluation, and data feedback.

USERS OF THE PROGRAM

The program is in current use in four school districts, three moderate to large urban and one rural; the socio-economic status mix is mainly blue collar/unskilled, with some middle class. Black and Hispanic students range from 2 to 95 percent.

Users who may be contacted for further information are:

Dr. Jack Eisenstein, Superintendent, Atlantic City Public Schools, NJ (609) 344-2837

Sandra Sittler, Council Chair, Reading School District, PA (215) 371-5710

Edna St. Paul, Principal, Lincoln High School, Jersey City, NJ (201) 547-5982

Robert Esch, Council Chair, Northampton Area School District, PA (215) 262-7811

PROGRAM OVERVIEW

Background. The program evolved out of the elementary-level School Effectiveness Training program, developed from 1979 onward by NJEA and Research for Better Schools (RBS). The research base includes Rutter *(15,000 Hours)*, change process literature, quality circles, the WRISE program, studies of productivity improvement and quality of work life projects in the public and private sectors, organizational development, and studies of school culture at RBS. First implementation occurred in December 1982.

Procedures. Program entry involves negotiation and decision by the Board, superintendent, the local teachers' association, building principal, and building association leadership. After an initial orientation meeting, Coordinating Councils are set up both at the district and the building level. A climate instrument, the School Assessment Survey (SAS), is administered, and results are fed back to the building council. A School Profile is also developed paralleling "exemplary school" descriptions. Building Council members receive training in problem-solving, team building, and communication as they look at data and develop immediate action plans. The time line for this is about 6 months.

Temporary task groups, made up of additional faculty, are created to study and make recommendations to address those issues that emerge as a result of the data collection activities. An improvement plan is developed, revised after feedback, and presented to appropriate decision-making groups. Implementation continues, with external assistance. A typical effort takes about 2 years; the effort is reviewed annually.

Assistance and resources available. RBS staff members provide 3 to 5 days for start-up assistance, then 2 days for a Building Council retreat, then meet with Council about every 2 weeks throughout implementation (including occasional retreats if needed). (RBS expects to develop turn-key trainers for the future.) Assistance includes priority-setting process help to the Council, review of high school reform studies, inservice planning, supportive materials, and advice to principal and Council chair.

CONDITIONS REQUIRED FOR EFFECTIVE IMPLEMENTATION

Entry. Districts and high schools enter voluntarily, with much care given to active decision-making at all levels (see above) and creation of the district Coordinating Council (which steers implementation, and integrates activities with inservice work, for example).

Operations. Preliminary work on improving organizational health precedes work on school problem-solving. Sustained work ("It's more than just a project.") is essential, along with active central office support. The principal must learn "how to participate and still stay in charge." Collaborative decision-making is also essential.

FEATURES OF SPECIAL INTEREST

The coordinating councils are a form of "management-labor cooperation." The active involvement of the local teacher association or union is important. There is strong emphasis on participatory planning and decision-making, and quality of work life. Treating the building council as the primary work site avoids excessive faculty conflict.

COSTS

Start-up. The program requires about 3 to 5 days of meetings at district and building level and a 2-day council retreat. There are no dollar costs for assistance provided. The SAS instrument cotsts $4 per person.

Operations. Building council meetings occur every 2 weeks (typical size, 15), and there are occasional retreats.

There is task group work involving added faculty. There are no added dollar costs beyond usual inservice funds.

PROGRAM IMPACT

Developer estimate. In three of four high schools, the council has taken over the program. There have been successful projects on discipline, academic emphasis, department coordination, and staff and student expectations. Improved procedures have been developed in such areas as attendance, cuts, and student orientation programs. New products (student or policy handbook) have appeared. Some curriculum development has occurred. There is an improved atmosphere for department-level work and cross-department sharing.

Other evaluative data. Documentation through monthy on-site interviews (Dawson, 1983) showed that the program in its first year established clear improvement mechanisms, heightened staff commitment, and led to many specific activities. Participants cite increased communication, staff unification, a committed plan for improving the school; some frustration and divisiveness was noted as well. No first-year impact on achievement was clearly established.

MATERIALS AVAILABLE

Program Description, orientation materials. (no charge)
School Assessment Survey (SAS). ($1.00)
School Profile. ($35.00)
School Assessment Survey: An Introductory Guide. Wilson, B.L., W.A. Firestone and R.E. Herriott, RBS Field Studies Component, November 1983. (manual for the SAS instrument; revised summer 1984).
A Report of the School Effectiveness Training/High School Development Program. Dawson, J.A., RBS Field Studies Component, December 1983. ($2.50)
Program Manual (available summer 1984)

CONTACT FOR FURTHER INFORMATION

Thomas Corcoran, Program Director, or Rima Miller, Team Leader. Research for Better Schools, 444 North Third Street, Philadelphia, PA 19123. (215) 574-9300.
Donald McNeely, New Jersey Education Association, 180 W. State Street, P.O. Box 1211, Trenton, NJ 08607. (609) 599-4561.
Dr. William Gaskins, Pennsylvania State Education Association, 400 North 3rd Street, Harrisburg PA 17105. (717) 255-7108.

SCHOOL IMPROVEMENT PROCESS

South Carolina Department of Education
Office of Accreditation and Administrative Services
1429 Senate Street
Columbia, SC 29201

SPONSOR · South Carolina Department of Education

OBJECTIVES/NEEDS ADDRESSED

The School Improvement Process seeks to improve student achievement by helping districts implement the components of effective schools in their areas. "The primary thrust is in changing attitudes and ideas to conform to the theory that all children are capable of learning." Improved instructional leadership and more effective classroom instruction are major goals. Active involvement of staff, parents and community members in school improvement activities is a secondary goal.

USERS OF THE PROGRAM

The program is in current use in 10 South Carolina districts, mostly small town/rural, with several urban areas represented. There is a wide socioeconomic status spread, although most districts fall into the blue-collar/middle class range. Minority percentages range from 30 to 70 percent black. Sixty schools are participating: 43 elementary, 9 junior high/middle, and 8 high schools.

Users who may be contacted for further information are:

Troy Nobles, Principal, Midland Valley High School, Aiken, SC (803) 593-9276
Bonnie [illegible], Principal, McDonald Elementary School, Georgetown, SC (803) 546-5004
John Halfacre, Principal, Springfield Elementary School, Charleston, SC (803) 556-2236

PROGRAM OVERVIEW

Background. The program was developed in 1982, by a team from the South Carolina Department of Education. The process was developed in response to a need to coordinate various state initiatives, and bring these projects together into a common effort. Effective schools literature (Edmonds, Lezotte, Brookover) forms the research base for program development.

Procedures. The state education association (SEA) selects districts for participation, based upon expressed interest, willingness to carry out the process, and greatest need. An evening orientation session enables key teachers, parents, and community members to learn about the program. Goals and activities are reviewed with staffs prior to the formation of school steering committees, which are responsible for administration of a needs assessment and analysis of data. Findings are presented to the faculty, and staff subcommittees are formed to review the data and determine priority areas for improvement. Committees develop school improvement plans (including objectives, activities, timelines, resources and budgets) to address needs in seven effective school correlates identified by the SEA.

Implementation occurs during the following year, as schools carry out improvement activities and monitor results. Examination of achievement test data and evaluation of plan implementation determine the need for revision of plan components. Assessment, planning and implementation of plan activities cover a 2-year period.

The Effective Schools Program is designed to support existing South Carolina legislation (Education Finance Act/Basic Skills Act). These laws require input from School Improvement Councils in a planning process, and identification of appropriate instructional objectives for all groups of students.

Assistance and resources available. Program consultants are available to conduct orientation sessions, and offer technical assistance and training during data analysis, planning and implementation phases. In 1983-84, each school received an average of 3 days of on-site technical assistance from SEA facilitators. This will be increased for the next school year; more support and training activities will be offered to participating schools. An implementation manual is currently being developed.

CONDITIONS REQUIRED FOR EFFECTIVE IMPLEMENTATION

Entry. An initial commitment to engage in self examination/collaborative planning is necessary. Faculty must be willing to "look beyond their own classroom, at the total school picture." The principal's willingness to participate in self-analysis, demonstrate leadership, and be open to the change process is an essential prerequisite. Continued district-level support is also needed.

Operations. Staff members must agree to join steering/subcommittees, meet regularly, and fulfill responsibilities during assessment, planning and implementation phases. Sustained commitment to the effective schools philosophy and belief that all students can learn are essential for successful implementation.

FEATURES OF SPECIAL INTEREST

The process encourages local districts to create their own programs, through the development of individual school plans to meet identified needs. The state offers resources and technical assistance, helping districts build capacity to initiate and monitor local plans. Community/parent involvement is a major goal of the Effective Schools program. An evening

orientation meeting enables community members to participate in the process.

COSTS

Start-up. Time costs for orientation sessions total 1 hour for a district/principals meeting, 1 to 2 hours for an evening meeting, and 1 hour for the faculty session at school.

Operations. Steering committees meet for a total of 60 to 70 hours, to develop procedures for administration of the needs assessment, and to analyze data. Sessions can be held during scheduled staff development periods, in lieu of faculty meetings, or after school hours. Initially, subcommittees meet weekly (1 to 2 hour sessions) to develop plan components. The principal is asked to reserve faculty conference time for sharing progress with staff, obtaining feedback, and gaining consensus.

There are no dollar costs to South Carolina schools for participation in the school effectiveness process. Schools may decide to reallocate existing local funds to implement improvement activities.

PROGRAM IMPACT

Developer estimate. The process has increased staff awareness of school needs, improved administrative-staff relationships, and had an impact upon the revision of state law (see below). Program activities have focused teachers' attention on the total mission of the school, leading to development of school-wide goals and objectives.

The Education Improvement Act of 1984 was passed in June 1984 by the South Carolina legislature. As a result of this bill, all schools in the state will be required to assess needs, and develop an annual school improvement plan, focusing on effective schools factors. Plans will replace annual school reports required under previous legislation. The Rand Corporation has characterized the South Carolina Educational Improvement Act as the most sweeping educational reform act in the nation.

Other evaluative data. Test scores throughout the state have increased substantially. While the increase may not be totally attributable to this program, it has occurred as a result of combined state-school improvement efforts. An evaluation instrument to measure impact of plan activities and achievement of objectives was being developed for use in 1984-85.

MATERIALS AVAILABLE

Effective Schools for South Carolina, brochure 1983. (no charge)
Implementation Manual, 1984. ($4.00)

CONTACT FOR FURTHER INFORMATION

John Tudor, Chief Supervisor, School Improvement Section, South Carolina Department of Education, Office of Accreditation and Administrative Services, 1429 Senate Street, Columbia, SC 29201. (803) 758-2841.

EFFECTIVE USE OF TIME PROGRAM

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Peabody Center for Effective Teaching (PCET)
Vanderbilt University
Box 34
Nashville, TN 37203

SPONSOR: Peabody Center/Vanderbilt University

OBJECTIVES/NEEDS ADDRESSED

The goal of the Effective Use of Time Program is to help teachers and students use classroom time in productive ways. The focus is on developing an awareness in teachers of how their own activities are related to the time students spend on academic tasks. Teachers are encouraged and guided to increase their skills in organizing and managing interactive instruction. Originally focused on reading in secondary schools (the program is described in *Educational Ideas That Work*, 9th ed.), the program is now used in elementary and middle schools as well, and covers other content areas (such as mathematics; intention is to add emphasis on thinking and reasoning skills).

USERS OF THE PROGRAM

The program is in current use in 13 school districts, ranging from large urban to rural in size. The socioeconomic status mix ranges from blue-collar/unskilled to middle/upper middle class. The number of black and Hispanic students varies from nearly none to 70 percent. The total of 67 schools includes 36 elementary, 25 middle/junior high, and 6 high schools.

Users who may be contacted for further information are:

Julian Prince, Superintendent, Tupelo City Public Schools, MS (601) 842-1464
Susan Williams, Coordinator, District Facilitator Project, NDN, Washington, DC (202) 282-0056
Roberta Devlin-Scherer, Associate Dean, National College of Education, Chicago, IL (312) 256-5150
Debra Sullivan, Director, Adolescent Education, Putnam County Schools, Winfield, WV (304) 586-3831
Sandra Simons, Consultant on Staff Development, Eugene, OR (503) 687-2181

PROGRAM OVERVIEW

Background. The program grew out of an NIE-supported research project, "Teaching Basic Reading Skills in Secondary Schools," conducted at SRI International by Jane Stallings (Stallings, Cory, Fairweather, and Needels, 1978). The findings of the observational study on teaching behaviors that were directly related to engaged time on task and reading gains were used to develop a training program, piloted with six school districts in 1979.

Procedures. Once a district and one or more schools decide to begin the program, they contact the Peabody Center for Effective Teaching and decide whether to have a Certified Trainer come to their site or to send an apprentice to Nashville. Next, they locate persons from their staff (often supervisors or substitute teachers) to receive 6 days of training as classroom observers. Following a general orientation session, the principal and teachers choose which teachers (grade levels, subjects) will participate.

Classroom observation is carried out for each teacher in the program during the same class period for 3 successive days. The observations include 52 teacher activity variables (such as percentage of time spent on organizing subject matter, on active monitoring of seatwork, on levels of questions, and types of feedback). Thirteen student variables are also assessed: questioning, responding, and time on task, for example.

The observation results are optically scanned and converted to profiles of 52 behaviors. The profiles are discussed at the first of five weekly 2½-hour workshop sessions (consisting of six to eight teachers), along with a review of the original research findings. Teachers compare their observed record with a criterion for each variable and set goals for improvement. Workshop sessions emphasize learning by doing (videotapes, role playing, "homework" exercises), and commitment to trying new classroom behavior. The subsequent workshops deal with organizing/structuring classroom activities and time management; student motivation and behavior management; questioning techniques and feedback; and structuring new information and curriculum alignment.

Between workshops 2, 3 and 4, there are additional *peer* observations. Each teacher observes in a classroom and records how the teacher interacts with students and which students are off task during which class activities. At the end of the semester, the formal observation is repeated, and new profiles are prepared and given back in workshop 6. Workshop 7 repeats the process at the end of the subsequent semester.

An adopting school district typically continues the program for several years, adding new teachers, training additional observers and internal trainers, and extending the work with early participants.

Assistance and resources available. To carry on the program, school districts must have their own personnel trained as "apprentices" (internal trainers) who will in turn train classroom observers and lead the workshops. This can be accomplished by sending apprentices to Nashville for training, or hiring a Certified Trainer to come to the local site. State funds may be available since this is one of the federally approved National Diffusion Network (NDN) programs.

CONDITIONS REQUIRED FOR EFFECTIVE IMPLEMENTATION

Entry. The preferred entry includes local commitment to having "apprentices" trained. The principal must be actively involved from the start. At least two teachers must be involved per school. It is best to involve teachers with a range of skills, and *not* include only those who "need help." The ideal start time is August for observer training, with the full sequence complete by the following summer.

Operations. Workshop size should not exceed six to eight participants; it is desirable that groups be homogeneous (by school level or subject). The peer observation is a crucial part of the approach. Peer observation data are kept confidential to the observed teacher. Sustained effort over several years is desirable, with only internal resources used.

FEATURES OF SPECIAL INTEREST

The substantial time devoted to observer training (6 days) makes good-quality data likely. The teacher profiles of behavior are based upon systematic observation and are directly linked to the ideas being taught in the workshops. The emphasis on training of internal trainers (3 weeks) and observers aids credibility and the likelihood of local ownership and continuation.

COSTS

Start-up. If National Diffusion Network funding continues, the training for apprentices has no dollar costs when conducted at the Center; participants pay living expenses and travel (3 weeks required). If the program is conducted by Certified Trainers at the participant school district's site, the observer training (6 days) and the initial information session (1 day) cost $150 to $200 a day plus expenses. At the local site the Certified Trainer then conducts two series of six workshops, totaling 12 days at $150 to $200 per day.

Operations. The observation materials and costs total $50 per person; preparing the profile costs $200 for all teachers combined. These profile costs are incurred at least twice, and preferably three times. After the program is initiated and internal trainers are used, there may be no additional dollar costs to the staff development budget. Substitute teachers are required for the two occasions of peer observation. The time spent by the regular observers (three class periods per teacher, two to three occasions) must also be included. Workshop sessions are typically held after school (3:30 to 6:00 p.m.).

PROGRAM IMPACT

Developer estimate. Teachers become more efficient at organizing and managing time, and use more interactive and varied instruction. Students' rate of time on task typically rises from 10 to 15 percent. These results are obtained in about 85 percent of schools using the program. Gains in reading have also been recorded. Increased attendance and reduced tardiness are also associated with implementation of this program.

Other evaluative data. None currently available.

MATERIALS AVAILABLE

The Accountability Model (program overview).

Program materials available during the course of the program (observer manual, workshop materials, videotapes, homework exercises).

Stallings, J.A., R. Cory, J. Fairweather and M. Needels. January 1978. *A Study of Basic Reading Skills Taught in Secondary Schools.* Menlo Park, CA: SRI, International.

Stallings, J., M. Needels, and N. Staybrook. 1979. *How to change the process of teaching basic reading skills in secondary schools.* Final report to the National Institute of Education. Menlo Park, CA: SRI, International.

CONTACT FOR FURTHER INFORMATION

Jane Stallings, Peabody Center for Effective Teaching, Box 34, Vanderbilt University, Nashville, TN 37203. (615) 322-8448.

SCHOOL EFFECTIVENESS PROGRAM

35

Research and Service Institute, Inc.
5126 Prince Phillip Cove
Brentwood, TN 37027

SPONSOR: Research and Service Institute

OBJECTIVES/NEEDS ADDRESSED

The School Effectiveness Program seeks to improve discipline and student achievement. Its major goals are to increase the order and structure of the schools, to raise student/staff expectations, and to build individual and group responsibility for student behavior and achievements. The focus is on changing school culture and norms; student involvement in school management; and inservice training for administrators, teachers, and students.

USERS OF THE PROGRAM

The program is in current use in eight districts of Missouri, Iowa, Nebraska, Nevada, and Tennessee. Areas are mostly urban, although some are suburban. The socioeconomic status is varied. Minority percentages also vary greatly, from 0 to 100 percent, and include black, Asian and Hispanic students. Current participants include two elementary, 2 junior high/middle, and 6 high schools.

Users who may be contacted for further information are:

Barbara Prior, Principal, East High School, Des Moines, IA (512) 265-0335

Jacqueline Jones, Principal, Wooster High School, Wooster County Schools, Reno, NV (702) 329-4243

Abbey Williams, Principal, Glencliff High School, Nashville, TN (615) 832-5118

PROGRAM OVERVIEW

Background. Dr. Furtwengler (a former teacher, principal and superintendent), after extensive review of short/long range processes to improve school discipline, and with assistance from many practicing administrators, developed the program in 1978. The research base includes effective schools literature (Evertson, Edmonds, Purkey and Smith), sociological research on norms and organizational change (Lewin), organizational culture (Deal and Kennedy, Wayson), leadership styles (Fiedler, Reddin, Hershey and Blanchard, Furtwengler and Konnert), and learner characteristics (Bransford, Hart, Springer and Deutsch).

Procedures. Once a school decides to join the program, five steps are followed: (1) Orientation and data collection, (2) Review of school status, (3) Student involvement, (4) Training and implementation, and (5) Annual review and planning.

In initial stages, the faculty is oriented to the process, a planning team selected, and base line data collected (climate profile, staff development inventory, achievement/attendance figures, school records). An expanded planning team analyzes the data, identifies needs and determines priorities. Formal and informal student leaders (usually 5 percent of the student population) are identified, and added to the team. Members decide upon issues to be addressed, and determine how to involve students in assuming responsibility for the school, its goals and programs.

A 3-day workshop is held, usually in August or September, in a retreat setting: at the secondary level it typically involves 50 to 70 formal and informal student leaders, the administrators, and a core of the faculty. The group at the retreat develops an action plan, and strikes new social agreements about the values and priorities of the school and how people will behave in school. Workshops in leadership, communication, and management skills are included during the 3-day session. Committees, formed at the workshop, are responsible for monitoring implementation of plan components at the school site. Annual school-wide assessments are utilized in evaluation of current activities and revision of plans for the next year.

The entire school improvement cycle spans an 18-month period.

Assistance and resources available. The program provides ongoing staff development and assistance during data collection/analysis phases. All training and retreat arrangements are coordinated by program staff. Participating schools receive on-site assistance approximately once each month. Many program inventories and related materials are available to participants.

1. School retreat package, including school planning materials, and leadership and group process training exercises.
2. Program Start-up structured interview questionnaire.
3. The School Effectiveness Profile (comparing scores to those of over 142 other schools).
4. School problem identification sheet for formal and informal student leaders.
5. Principal's Position Effectiveness Inventory and Profile: optional profile reports include person effectiveness, expectation and perception awareness, consistency of expectations, and consistency of perceptions.
6. The Training Needs Assessment Inventory.
7. The School Discipline Prevention Inventory.
8. The Ranking of Offenses Consensus Decision-making exercise.
9. The Student, Teacher, Leadership Styles Inventories.
10. The learner profile showing learner needs, learner values, learner communication preferences, learner methods, learner self-image, and learner personality. (Norms for different groups including adults.)
11. Ten problem student cases for teachers.

Two-day training programs are also available for retreat directors and trainers.

The School Effectiveness Program is available to schools throughout the country.

CONDITIONS REQUIRED FOR EFFECTIVE IMPLEMENTATION

Entry. Principal and staff must have interest in pooling resources to improve student behavior and achievement. The principal's willingness to involve students and share the decision-making process with team members is essential.

Operations. The critical conditions include: a sustained commitment to school based planning; willingness of team members to attend meetings and inservice training; and staff cooperation during planning and implementation stages.

FEATURES OF SPECIAL INTEREST

The program is unusually well-grounded in knowledge of the school as a functioning organization. The student involvement component is a unique feature. Students learn how to orchestrate change and accept responsibilities for school-wide improvement. "The emphasis on changing norms and agreements of staff and students leads to shared acceptance of goals and lasting change." Data collection is comprehensive and provides teams with a variety of assessment information to utilize in planning stages.

COSTS

Start-up. Time costs include a half-day entry interview with the principal and 3 to 4 hours of staff time for completion of needs assessment instruments (this can be accomplished during a faculty meeting).

Operations. Time is required for monthly planning meetings after school hours for team members (hours vary); for a 2 to 3 day workshop/retreat for team members (includes 40 to 70 student leaders) and selected staff; and for inservice activities scheduled during staff development hours. Two-day training programs are available for retreat directors and trainers.

Contract costs range from $5,000 to $17,000 (includes consultants, travel expenses, retreat/workshop, inservice training, materials). Schools may also contract for per diem consultant services at a daily rate of $400 to $500.

PROGRAM IMPACT

Developer estimate. The program has improved climate, attendance, student behavior and student achievement. Impact has been seen in decreased student referrals, and expulsions. Tardiness, truancy, fighting, and vandalism have also shown marked decreases.

Other evaluative data. Individual schools have reported substantial decreases in student suspensions: from 337 to 61; from 336 to 200; from 928 to 42%. One high school reported 6,813 fewer class cuts within a 1-year period. The average daily attendance in all schools increased, in one school from 85 to 93 percent; several others experienced increases from 81 to 86 percent. The paper and pencil measures of overall school effectiveness as reported by teachers in the schools have shown consistent increases.

MATERIALS AVAILABLE

(For program participants and directory readers)

Program description. (no charge)

School Effectiveness Inventory and School Profile, published 1983 by Research and Service Institute. ($3.75 per respondent)

Principal's Position Effectiveness Inventory. ($50.00 per scored profile)

Retreat training packet. ($35.00)

Learner Inventory and profile. ($20.00 per profile)

Consensus ranking sheets: offenses, correction, and prevention. ($1.00.)

(Prices subject to change and discounts available with volume requests.)

Text: *Improving School Discipline,* Furtwengler, W.J., and W. Konnert, 1982. (Available from Allyn & Bacon, Boston, MA. Approximate cost, $30.00)

CONTACT FOR FURTHER INFORMATION

Dr. Willis J. Furtwengler, School Effectiveness Program, Research and Service Institute, Inc., 5126 Prince Phillip Cove, Brentwood, TN 37027. (615) 377-6493. OR:

Peabody College, Vanderbilt University, Office of Educational Services, P.O. Box 164, Nashville, TN 37203. (615) 322-8035.

SYSTEMATIC PROGRAM FOR INSTRUCTION, REMEDIATION AND ACCELERATION OF LEARNING (SPIRAL)

36

Norfolk Public Schools
800 East City Hall Avenue
P.O. Box 1357
Norfolk, VA 23501

SPONSOR: Norfolk Public Schools

OBJECTIVES/NEEDS ADDRESSED

SPIRAL was designed to raise student achievement levels in all Norfolk elementary schools. The program aims to improve instruction by instituting a school-wide planning process, based in effective schools research, as well as specially-designed SPIRAL classes for students who do not meet promotion standards. Two major programmatic goals have been identified: to reduce the retention rate of students in grades 1 through 6 by 20 percent; and to enable 25 percent of the students who were retained in 1983-84 to rejoin their classmates from the previous year by the end of the first project year.

USERS OF THE PROGRAM

The program is in current use in 40 urban elementary schools in Norfolk. There is a wide socioeconomic status range in the district. Minority percentages range from 23 to 81 percent, mostly black, with some Asian students.

The program is limited to schools in the Norfolk district, but the program staff are willing to provide advice on adaptation elsewhere.

Users who may be contacted for further information are:

John Smith, Principal, Larchmont Elementary School, Norfolk, VA (804) 489-4894

Janice Root, Acting Assistant Principal, Jacox Elementary School, Norfolk, VA (804) 441-2713

Robert Hahn, Principal, Little Creek Elementary School, Norfolk, VA (804) 583-0151

PROGRAM OVERVIEW

Background. The program was implemented in 1983, by a steering committee composed of teachers, building and central office administrators, and representatives from the local teachers' union, following examination of similar programs in other districts (New York, Milwaukee), and a review of effective schools literature (Edmonds, Brookover, Lezotte).

An awareness stage, prior to implementation, offered principals, central office administrators, teachers and other staff members opportunities to become familiar with SPIRAL, and the research base from which it was developed.

Procedures. The program has three basic steps: Awareness, Training and Implementation, and Maintenance. A training of trainers approach was utilized, enabling a cadre of principals, teachers and coordinators to prepare all elementary principals and teachers to implement the SPIRAL program.

A district school-improvement steering committee developed programmatic goals, needs assessment instruments, a time line for implementing the SPIRAL model, and a handbook for the program.

Each school forms a school improvement team, responsible for the development of an improvement plan, based upon the needs assessment and a school profile that identifies strengths/weaknesses relative to the six effective school correlates.

Teams disseminate effective schools information to staff, and establish procedures and time lines for plan implementation. The majority of inservice training is provided at the school site by the principal and his staff to assist members in carrying out all phases of the program. City-wide review and update sessions for in-building inservice teams are held as needed. A spring evaluation (administration of needs assessment questionnaire) is the basis for review of progress to date and revision of improvement plans for the coming year.

SPIRAL classes comprise one component of the School Improvement Program. Alternative and innovative teaching strategies are utilized in small classes of 16 students, to assist children who have experienced academic difficulty and who were previously retained. These classes do not serve students who have been identified as needing special education services. Teachers selected were recommended by their principals because they had demonstrated success in working with remedial students, and indicated a desire to teach in a SPIRAL class setting. Continuous training, support and resources are made available to teachers of SPIRAL classes.

Assistance and resources available. All Central Office staff serve as program resources. They include members of the departments of Human Relations and Staff Development; Instruction; and Research and Testing. Continuous training is provided for cadre members, principals, staffs, and SPIRAL teachers.

Principals' support groups have been created to promote sharing and exchange of ideas. SPIRAL Teacher Associations (by geographical area) meet regularly with program representatives to discuss teaching activities and strategies employed in SPIRAL classes. Teachers in these associations schedule their meetings (six to eight per year) and set their own agendas. Central office staff members are on call to provide on-site technical assistance to schools when requested.

CONDITIONS REQUIRED FOR EFFECTIVE IMPLEMENTATION

Entry. District commitment (by the local school board and superintendent's staff) to train central office staff and

principals is essential. A willingness to provide personnel and resource support is necessary. Involvement of principals and teachers in the development of the program is crucial.

Operations. Well-planned inservice activities for staff members must precede program implementation. An understanding of, and commitment to, collaborative planning is required. In order to meet the needs of students in SPIRAL classes, teachers must follow recommended practices, demonstrate high expectations for all students, and be committed to the accomplishment of program goals.

Personal interviews with the principal, conducted by the superintendent and his staff to determine program progress and future direction, are paramount.

Positive reinforcement of efforts by all personnel to attain goals is imperative, beginning with the school board and extending to the classroom teacher.

FEATURES OF SPECIAL INTEREST

Intensive training of a cadre of local trainers at the Michigan State University School Improvement Summer Training Institute created a district capacity to offer ongoing support at the local school level. The involvement of all central office branches in the effective schools process provides varied resources. The creation of SPIRAL classes offers an instructional model designed to meet the needs of students who have not met promotion standards. SPIRAL teachers and school principals receive continued support through support groups.

COSTS

Start-up. Time costs for awareness sessions total 6 hours for principals and 3 hours for staff. Summer training for the cadre group who attended the MSU summer training institute occurred during a 1-week period (4 credit hours). Continuous in-building inservice sessions were conducted throughout the year during faculty meeting time and regularly scheduled city-wide inservice days. All inservice for the initial implementation year was conclusively directed toward the school improvement program. Principals and two teacher representatives from each school were required to attend six 2-hour training workshops during the initial year of implementation. Teachers and administrators received non-college credit toward state certification renewal for their participation.

Operations. School improvement teams and SPIRAL support groups meet regularly, during and after school hours. Meeting times and number of sessions are determined by each committee. Optional inservice review sessions will be scheduled for each subsequent year. All staff inservice training is conducted during school hours. SPIRAL teachers receive graduate credit from a local university, paid for by the school district, for attendance at a voluntary 1-week (16 hours) summer seminar.

The district assumes all costs for staff development and organization of SPIRAL classes. There are no dollar costs to local schools participating in the program.

PROGRAM IMPACT

Developer estimate. The program has resulted in a net decrease in student retention of 6.1 percent. Altogether, 25.8 percent of students previously retained at the beginning of the 1983-84 school year were able to rejoin their classmates from the previous year by meeting promotion standards.

Based upon Norfolk's definition of an effective school, 16 of the 40 participating schools now qualify as being "effective," in the SPIRAL program implementation year.

Other evaluative data. None currently available.

MATERIALS AVAILABLE

SPIRAL: A Guide to School Improvement (handbook). Norfolk Public Schools, 1984. (Available on request; cost to be determined)

SPIRAL Needs Assessment Instruments (available only to program participants)

CONTACT FOR FURTHER INFORMATION

Eddie Hall, Assistant Director of Instruction and Coordinator of SPIRAL, Norfolk Public Schools, 800 East City Hall Avenue, P.O. Box 1357, Norfolk, VA 23501. (804) 441-2616.

Ann B. Madison, Director of Human Relations and Staff Development, Norfolk Public Schools. (804) 441-2780.

Dr. Anna G. Dodson, Director of Research and Testing, Norfolk Public Schools. (804) 441-2319.

VERMONT SCHOOL IMPROVEMENT INSTITUTE

Department of Organizational Counseling and Foundational Studies
College of Education and Social Services
University of Vermont
228 Waterman Building
Burlington, VT 05405

SPONSOR: University of Vermont

OBJECTIVES/NEEDS ADDRESSED

The Vermont School Improvement Institute was created to assist local districts in improving schools through a needs assessment process and long-range planning activities. The Institute serves an outreach function linking university resources with schools, by forming a liaison arrangement with local districts in cooperation with the Vermont Department of Education.

The primary goal of Institute activities is to raise student achievement through the implementation of improvement efforts, based on a needs assessment of school effectiveness characteristics. The process focuses heavily on building internal capacity for self-analysis and plan implementation within districts, so that schools are able to repeat the process with their own resources.

USERS OF THE PROGRAM

Four rural Vermont districts have contracted for Institute services in nine schools (seven elementary, one middle and one comprehensive school). All districts are in the low socioeconomic status range. The student population is almost all white.

Users who may be contacted for further information are:

Bruce Richardson, Superintendent, Orleans SW School District, Orleans, VT (802) 472-5787

David Ford, Principal, Craftsbury Academy, Craftsbury Common, VT (802) 586-2541

John Connolly, Principal, Mount Abraham High School, Bristol, VT (802) 453-2333

PROGRAM OVERVIEW

Background. This program was an outgrowth of a prior state/university effort, "Institute for Effective Schools." Initial implementation occurred in 1981, following review of effective schools research and visits to other school improvement programs. The process is adapted from the New York City and Connecticut State Department of Education programs, and draws heavily on Gene Hall's Concerns-Based Adoption Model (CBAM).

Procedures. Individual schools/districts can contract with the Institute for a variety of services. Contract costs vary, depending upon school size and needs. The nine-step process begins with a request by the school administration for information on effective schools research and the school assessment/information program *(Step 1)*. In *Step 2*, building staff receive this information during a presentation by program representatives. Once building staff and administration agree to undertake the assessment/improvement process *(Step 3)*, the formal needs assessment process *(Step 4)* begins.

The assessment, conducted by a university team, includes interviewing all faculty, and gathering achievement data from the past few years and other archival data. The team presents and explains the results of the assessment to the principal in *Step 5*, and to the faculty in *Step 6*. Action Planning, *Step 7*, involves a small group of the building staff who review results in detail, and develop a plan for school improvement based on assessment results. In *Step 8*, the Action Plan is presented for building approval, and necessary revisions are made. Implementation, *Step 9*, occurs as necessary resources are provided by the building and central administration.

The normal expectation is that work will be sustained over a 5 to 7-year period.

Assistance and resources available. The Institute team conducts awareness presentations for administration and staff, carries out a 3-day needs assessment process, and meets twice with school committees after the assessment is completed to assist with Action Planning. A related 16-session course on school improvement is offered through the Division of Continuing Education. A 1-week summer awareness institute is also offered.

CONDITIONS REQUIRED FOR EFFECTIVE IMPLEMENTATION

Entry. Administration and staff commitment to participate is needed. Staff attendance at awareness session and willingness to complete a 1-hour interview are secondary requirements.

Operations. Planning teams must agree to meet biweekly for 3-hour sessions and work with institute consultants to carry out the assessment and planning process.

FEATURES OF SPECIAL INTEREST

The program focuses on rural districts. The thorough needs assessment process provides an opportunity for each school to modify up to 20 percent of the items on the Connecticut interview instrument. These revisions allow for each school to include items related to specific areas of interest, and tailor the interview to their needs. The emphasis on historical data and the long-term commitment to sustained work are noteworthy.

COSTS

Start-up. Current contract costs range from $2,500 (for a small school of 8 to 9 teachers receiving 40 consultant hours annually from two staff members), to $4,800 (for a 25 to 30 teacher school receiving 90 to 100 consultant hours from 3 to 4 staff members). The Institute has received substantial subsidy from university sources, and added support from grants and the Northeast Regional Exchange. Reduction in these funds in 1984-85 will probably lead to dollar costs about double those given above.

Operations. Schools may choose to provide substitutes to cover classes of committee members for biweekly meetings; organize and fund weekend retreats; or request that committee members meet on their own time. Schools are also responsible for all xeroxing costs ($500 to $700).

PROGRAM IMPACT

Developer estimate. Schools have successfully implemented programs in curriculum development and reorganization of existing school resources. These changes have led to increased student achievement in basic skills.

Other evaluative data. Achievement test scores are compared historically/longitudinally and analyzed as part of the evaluative process. Follow-up interviews with all schools were held in the fall of 1984 to assess effectiveness of process and improvement activities.

MATERIALS AVAILABLE

Program Description. (no charge)

Text: *School Improvement, Theory and Practice.* Ducharme, E., and R. Carlson. eds. In press. ($35.00)

Meyers, H.W. The disaggregation of student outcome in pre-assessment: more than a snapshot. Paper read at AERA meeting, New Orleans, 1984. (Available in ERIC)

CONTACT FOR FURTHER INFORMATION

Herman W. Meyers, School Improvement Institute, University of Vermont, Department of Organizational Counseling and Foundational Studies, College of Education and Social Services, 228 Waterman Building, Burlington, VT 05405. (802) 656-2030.

PROJECT RISE (Rising to Individual Scholastic Excellence)

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Milwaukee Public Schools
5225 West Vliet Street
P.O. Drawer 10K
Milwaukee, WI 53201

SPONSOR: Milwaukee Public Schools

OBJECTIVES/NEEDS ADDRESSED

Project RISE represents a system-wide commitment to develop instructionally effective schools. The program seeks to improve student achievement, attendance, and attitudes through locally developed improvement plans in each of seven effective school components: instructional leadership, school climate, curriculum, instruction, coordination of supportive services, parental and community involvement, and evaluation of student progress.

USERS OF THE PROGRAM

The program is now in use in all Milwaukee schools, serving approximately 88,000 students. This urban district has a wide socioeconomic status range. Minority percentages range from 35 to 90 percent black. Participating in Project RISE are 103 elementary, 18 junior high/middle, and 15 high schools.

Users who may be contacted for further information are:

Harold Galitzer, Principal, Siefert School, Milwaukee, WI (414) 933-8865

Gerald Vance, Principal, Auer Avenue School, Milwaukee, WI (414) 449-8728

PROGRAM OVERVIEW

Background. RISE was initiated in 1979 at 18 low-achieving elementary schools and 2 middle schools. These pilot sites received effective schools training and central office assistance in adopting programs, selected by the National Diffusion Network or initiated locally, to meet identified needs. RISE continued to expand, using existing personnel resources to involve additional schools. Effective schools research (Edmonds, Brookover, Lezotte), as well as effective teaching studies (Hunter), and instructional leadership studies (Bunch) formed the basis for the RISE model.

Procedures. Much time in initial stages is devoted to examination of school effectiveness research at the local level. The program provides training and materials to familiarize principals and staffs with effective schools practices, and the RISE process.

Each school receives a profile summary of recent data on itself, including information on student achievement pattern, attendance and discipline, and school characteristics (size, student population, staff). The principal and school planning committee review the profile, and conduct a needs assessment to obtain additional data about the school in relation to effective school components. Staff/school attitudes, practices and philosophies are examined during the assessment phase.

Committees analyze results, identify needs and set priorities for school-wide improvement efforts. A written school plan is developed by committees with staff/parent input. Plans include a listing of goals, specific improvement activities, leadership responsibilities, time lines, principal assessment and evaluation measures. Activities are coordinated with standardized curriculum policies being adopted throughout the Milwaukee system. Once plans are accepted by staff/parents, and approved by central office supervisors, activities are implemented. Plan components are continually reassessed and revised, based upon ongoing evaluation and examination of student achievement data.

Orientation, assessment and planning stages are generally completed during the first year. Implementation activities usually commence in the second.

Assistance and resources available. The program offers inservice training in effective schools practices for principals and teachers, and ongoing support throughout the improvement process. Two full-time staff members (curriculum specialist and administrative specialist) are available to provide technical assistance, on an "as needed" basis.

A central office team visits selected RISE schools each year, to evaluate the progress of plan implementation, and make improvement recommendations. Additional assistance is available from Dr. William Kritek, at the University of Wisconsin—Milwaukee, who has developed program materials and now serves as a resource person to high schools.

RISE planning guides for elementary, middle and high schools provide information on effective schools research, and recommend procedures for implementing the process. In addition to a plan outline, completed plans from RISE schools are available to assist committees in organizing their improvement activities into plan format.

The program is limited to Milwaukee schools, but the support staff is willing to supply advice concerning replication.

CONDITIONS REQUIRED FOR EFFECTIVE IMPLEMENTATION

Entry. Principal/staff commitment to attend training sessions and support planning committee efforts is needed.

Operations. The process requires staff/parent participation in the needs assessment process, as well as sustained commitment to work with planning committees in developing objectives, formulating plans, and evaluating program effectiveness.

FEATURES OF SPECIAL INTEREST

RISE was one of the first system-wide school improvement efforts in 1979. It is notable for the careful preliminary grounding of participants in effective schools concepts, and for the use of standard profile data which can be expanded by the school. Many school systems throughout the country have utilized RISE materials and other effective schools materials developed within the Milwaukee public schools.

The program is not voluntary; during program development and expansion, schools were selected for participation based upon greatest need. Schools receive much support and training in implementing the process, but are encouraged to maintain autonomy in designing improvement plans to meet individual needs. A close working relationship with the University of Wisconsin—Milwaukee has been a key ingredient in the development of the RISE Project.

COSTS

Start-up. Initial training sessions (orientations; review of effective schools literature) require 50 hours of staff/principal participation. Data collection during the needs assessment phase involves a time commitment of 8 hours from all staff members.

Operations. Time costs for RISE principals include monthly half-day meetings with central office personnel, and additional time (hours vary) for ongoing planning and implementation efforts. Teacher training activities usually occur during staff development time scheduled within the school day. Planning committees also meet during designated staff development hours. There are no dollar costs to Milwaukee schools participating in the program.

PROGRAM IMPACT

Developer estimate. Gains in student achievement, improved attitudes of administrators and staff, and increased levels of cooperative planning have resulted in RISE schools. Most principals have strengthened their instructional leadership abilities, and many effective schools components have been implemented. A Phi Delta Kappan article about RISE describes a variety of "RISE improvements": scheduling of common school-wide periods for reading, math and language arts; student team learning approaches; school-wide homework policies; elimination of Chapter 1 pull-out programs, or improved coordination of Chapter 1 and other local programs; and student recognition activities.

Other evaluative data. A 6-year comparative study (1977-83) was conducted to determine the growth of pupil achievement in RISE schools versus city-wide data. A RISE evaluation document (1984) reports substantial achievement gains for RISE pupils, in relation to city-wide achievement figures. The 1977-78 discrepancy between RISE and city-wide achievement in reading of 22 percent was reduced to 9 percent 6 years later. For mathematics, a 19 percent discrepancy was reduced to only 2 percent.

MATERIALS AVAILABLE

Rising to Individual Scholastic Excellence: A Guide to School Effectiveness. ($1.50)

Good...getting better! Elementary School Planning Guide. ($1.50)

High School and Middle School Planning Guide. ($2.00)

Project RISE Evaluation, January 1984. ($3.75)

Sample School Effectiveness Plans from: Palmer School ($1.00); Greenfield School ($0.50); Webster Middle School ($1.50); Madison High School ($0.65).

(All costs include postage. Please address inquiries for materials to Mr. Robert Baer or Dr. Richard Doornek—see address below)

Articles:

Eubanks, E., and D. Levine. A First Look at Effective Schools Projects in New York and Milwaukee. *Phi Delta Kappan*, June 1983.

McCormack-Larkin, M., and W.J. Kritek. Milwaukee's Project RISE. *Educational Leadership*, December 1982.

CONTACT FOR FURTHER INFORMATION

Dr. David A. Bennett, Deputy Superintendent, Milwaukee Public Schools, 5225 West Vliet Street, P.O. Drawer 10K, Milwaukee, WI 53201. (414) 475-8004.

Robert Baer, Administrative Specialist—RISE, Milwaukee Public Schools. (414) 475-8004.

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WISCONSIN PROGRAM FOR THE RENEWAL AND IMPROVEMENT OF SECONDARY EDUCATION (WRISE)

University of Wisconsin-Madison
School of Education
1025 West Johnson Street
Madison, WI 53706

SPONSOR: University of Wisconsin-Madison

OBJECTIVES/NEEDS ADDRESSED

The goal of WRISE is to enable any secondary school to establish its own improvement capability. It also aims to help the central office establish a district-wide improvement capability. WRISE involves principals, teachers, and counselors in assessing the school's needs and planning improvement activities.

USERS OF THE PROGRAM

Approximately 100 junior high/middle and 25 high schools, mostly in Wisconsin, are using WRISE. The program is operating in 1 to 15 districts in each of the 12 Wisconsin Cooperative Education Service Agencies (CESAs). A small number of schools in Illinois, New Jersey, Ohio and Oregon use WRISE. The total of 40 districts includes large city, suburban and rural areas. The socioeconomic status mix ranges from blue-collar/unskilled to middle/upper-middle class. Black and Hispanic students number from 2 to 60 percent.

Users who may be contacted for further information are:

Frank M. Kennedy, District Administrator, Cedarburg School District (suburban), Cedarburg, WI (414) 497-4377

James M. Gehrke, Principal, Cameron High School (rural), Cameron, WI (715) 458-4510

Donald Luebke, Principal, Steuben Middle School (urban), Milwaukee, WI (414) 449-0395

PROGRAM OVERVIEW

Background. WRISE originated from a research and development project conducted cooperatively by the Wisconsin Center for Education Research and five secondary schools of Illinois, Oregon, and Wisconsin during 1977-81, under the leadership of Professors Herbert J. Klausmeier and James. M. Lipman. The WRISE diffusion model for secondary school improvement began in the spring of 1981.

The WRISE state-wide diffusion process in Wisconsin is implemented by a consortium consisting of the Wisconsin Department of Public Instruction, the Cooperative Education Service Agencies of the 12 geographical regions of Wisconsin, and the state universities in the various geographical regions.

Procedures. WRISE includes a theoretical design consisting of: objectives that aid local schools in determining areas of needed improvement; strategies for raising student achievement and attaining other desired student outcomes; school structures and processes that are essential for implementing these strategies; print and audiovisual materials that explain the design and how to implement it; and a state-wide diffusion model.

The five-phase WRISE diffusion model begins with a 1-day awareness conference for district administrators and principals. Attendance at this familiarization session enables school persons to decide whether they wish to participate further and, if so, to plan for Phase 2.

Phase 2 includes a 2½-day skill-building and planning workshop for school teams from each school, comprised of the principal, two to five teachers, and a district official. The goals of the WRISE training session are for the teams to become familiar with WRISE improvement/self-renewal processes, to develop improvement plans, and to arrange for follow-up network activities with the local university and/or CESA region. Workshops focus on three local school improvement strategies (improvement of student advising, instructional programming, and goal-setting).

In *Phase 3,* CESAs and/or universities bring together representatives of the schools who have participated in WRISE workshops for 1-day conferences two to four times per year. These sessions are directed toward sharing experiences and cooperative problem-solving.

Additional follow-up activities are provided for schools in *Phase 4.* Universities and/or CESA regions aid schools in starting/refining their improvement programs. *Phase 5* ensures that schools receive assistance in continually refining their improvement activities. The schools of Wisconsin have formed an Alliance of WRISE schools for this purpose.

Assistance and resources available. Technical assistance to WRISE participants is available from the Wisconsin Department of Public Instruction, CESA regional agencies, state universities, and "user consultants" who have experience in utilizing the WRISE Model. Non-credit/credit courses are offered through state universities.

Illustrative of one form of university assistance are 1- to 3-day noncredit sessions on topics such as school effectiveness, improvement of instruction, school climate/discipline, improvement planning, and competency-based teaching. Assistance is also provided through graduate courses, offered at a university site.

A complete set of WRISE training materials is available. These consist of a book explaining the theoretical design, an implementation manual, 10 sound color filmstrips that depict

exemplary practices in schools across the nation, and 9 school-experience audiocassettes on which teachers and other school personnel depicted in the filmstrips describe their practices.

CONDITIONS REQUIRED FOR EFFECTIVE IMPLEMENTATION

Entry. Entry is preceded by attendance at an awareness conference, when principals/district officials decide whether they wish to participate in WRISE training.

Operations. A district representative must agree to join the school's planning team and participate in improvement activities. WRISE is designed to allow local school autonomy/ownership. Schools are encouraged to develop their own initiatives.

FEATURES OF SPECIAL INTEREST

WRISE endorses local autonomy, is not prescriptive, and builds permanent improvement ability within schools by establishing cooperative working relationships among principals/teachers/district office. The well-conceptualized design aids attention to objectives, strategies, structures and processes as an integrated whole; the supporting materials and design are thorough. The statewide consortium model allows for diffusion and follow-up services. To facilitate diffusion, an Office of School Improvement has been organized in the Wisconsin Department of Public Instruction.

COSTS

Start-up. The awareness conference lasts 1 day, and ranges from $10 to $25 per person for registration.

Operations. The 2½-day training workshop requires registration fees of $100 for the first participant and $80 for each additional person. Substitute costs (approximately $50 per day) for teachers attending training sessions are paid by local schools. Most services provided by CESAs are covered in blanket charges to schools for ongoing staff development work. Consultant costs for additional support requested by individual schools are paid by the schools. A set of WRISE training materials totals $170.

PROGRAM IMPACT

Developer estimate. Schools implementing the design and developing an annual improvement plan which includes measurable goals can attain desired student outcomes and simultaneously develop a permanent improvement capability. Two of the three Wisconsin secondary schools selected by Secretary Bell in 1983 as schools of excellence, and two of the four selected in 1984, participated in WRISE workshops and are implementing most of the design.

Other evaluative data. Continuing examination of school records/test scores and student responses on attitude and self-concept inventories show that WRISE schools have: raised student achievement as measured by results of achievement tests/minimum competency tests; improved attendance and reduced drop-out rates; developed more favorable attitudes toward learning and schooling; and developed more positive self-concepts and greater self-discipline. A summative evaluation of the training materials conducted in both school and university settings showed them to be usable and effective.

MATERIALS AVAILABLE

Introductory filmstrip and guide: Introduction to WRISE. ($12.00)

Klausmeier, H., and J.C. Daresh. 1983. *Secondary School Improvement Manual for WRISE* ($10.00)

Set of 10 color/sound filmstrips and printed projection guides (only the introductory filmstrip can be purchased separately, $120.00)

Set of 9 audiocassettes and printed guides. ($50.00)

(Complete set of items listed above. $170.00)

Research report: *Improvement of Secondary Education through Research: Five Longitudinal Case Studies.* ($17.00)

(Materials listed above may be ordered from Wisconsin Center for Education Research, Center Document Service, 1025 West Johnson Street, Room 769, Madison, Wisconsin 53706.)

Text: *The renewal and improvement of secondary education: concepts and practice.* Klausmeier, H.J., J.M. Lipham and J.C. Daresh. 1983. (Paperback $12.75, hardcover $26.00; text may be ordered from University Press of America, 470 Boston Way, Lanham, MD 20706.)

Klausmeier, H.J. *Usability and Effectiveness of A Program For the Renewal and Improvement of Secondary Education in Local School and University Settings: A Summative Evaluation.* (Order from ERIC Document Reproduction Service, P.O. Box 190, Arlington, VA 22210. Microfiche, $0.97)

CONTACT FOR FURTHER INFORMATION

Dr. Herbert Klausmeier, Wisconsin Center for Education Research, University of Wisconsin-Madison, School of Education, 1025 West Johnson Street, Madison, WI 53706. (608) 262-0840.

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Adler, M.J. 1982. *The Paideia Proposal*. New York: MacMillan Publishing Co.

Ames, C. 1981. Competitive versus cooperative reward structure: The influence of individual and group performance factors on achievement attributions and affect. *American Educational Research Journal*. 18:273-288.

Anderson, B., C. Citron, and C. Pipho. 1983. Achievement standards and requirements for high school graduation. Denver, CO: Education Commission of the States.

Anderson, C.S. 1982. The search for school climate: A review of the research. *Review of Educational Research*. 52(3):368-420.

Anderson, G.L. 1970. Effects of classroom social climate on individual learning. *American Educational Research Journal*. 7(2):135-152.

Anderson, L. 1976. An empirical investigation of individual differences in time to learn. *Journal of Educational Psychology*. 68:226-233.

Anderson, L., C. Evertson, and J. Brophy. 1979. An experimental study of effective teaching in first grade reading groups. *Elementary School Journal*. 79:193-223.

Andringa, R., R. Brown, and D. Burnes. 1984. A changing federalism in the U.S. education system. Denver, CO: Education Commission of the States.

Arlin, M. 1984. Time variability in mastery learning. *American Educational Research Journal*. 21:103-120.

——— 1982. Teacher responses to student time differences in mastery learning. *American Journal of Education*. 90:334-352.

Aronson, E., C. Stephan, J. Sikes, N. Blaney, and M. Snapp. 1978. *The Jigsaw Classroom*. Beverly Hills, CA: Sage.

Association for Supervision and Curriculum Development (producers). Effective classroom management for the elementary school. Carolyn Evertson. (Video recording). Alexandria, VA: ASCD, 225 N. Washington Avenue.

——— Teaching mathematics effectively. Thomas L. Good. (Video recording). Alexandria, VA: ASCD, 225 N. Washington Avenue.

Au, K.H. 1980. Participation structures in a reading lesson with Hawaiian children: Analysis of a culturally appropriate instructional event. *Anthropology and Education Quarterly*. 11:91-115.

Baltzell, D.C., and R.A. Dentler. 1983. *Selecting American school principals: A sourcebook for educators*. Washington, DC: The National Institute of Education.

Bangert, R.L., J.A. Kulik, and C.C. Kulik, 1983. Individualized systems of instruction in secondary schools. *Review of Educational Research*. 53:143-158.

Barker, R.G., and P. Gump. 1964. *Big School, Small School: High School Size and Student Behavior*. Stanford, CA: Stanford University Press.

Barnett, B., and N. Filby. 1984. Effects of the presentation of reading material and instructional pacing on first graders' reading fluency. Paper presented at the annual meeting of the American Educational Research Association, New Orleans, LA.

Barr, R. 1975. How children are taught to read: Grouping and pacing. *School Review*. 83:479-498.

Barr, R., and R. Dreeben. 1983. *How Schools Work*. Chicago, IL: University of Chicago Press.

Barr, R., and R. Dreeben. 1977. Instruction in classrooms. *Review of Research in Education*. Vol. 5. Ed. L.S. Shulman. Itasca, IL: Peacock.

Barth, R.A., and T.E. Deal. 1982. The principalship: Views from without and within. Paper prepared for the National Institute of Education.

Bassin, M., T. Gross, and P. Jordan. 1979. Developing renewal processes in urban high schools. *Theory Into Practice*. 18(2):73-81.

Becker, W.C. 1977. Teaching reading and language to the disadvantaged—what we have learned from field research. *Harvard Educational Review*. 47:518-543.

Beckerman, T., and T.L. Good. 1981. The classroom ratio of high- and low- aptitude students and its effect on achievement. *American Educational Research Journal*. 18:317-328.

Bennis, W. 1984. Transformation power and leadership. *Leadership and Organizational Culture*. Ed. T.J. Sergiovanni and J.E. Corbally. Urbana-Champaign, IL: University of Illinois Press.

Berliner, D. 1983. If teachers were thought of as executives: Implications for teacher preparation and certification. Paper prepared for the National Institute of Education.

Berman, P.W. 1981. Educational change: An implementation paradigm. *Improving Schools*. Ed. R. Lehming and M. Kane. Beverly Hills, CA: Sage.

Berman, P., and M.W. McLaughlin. 1975. *Federal Programs Supporting Educational Change: Vol. IV: The Findings in Review*. R-1589/4-HEW. Santa Monica, CA: Rand Corporation.

Bidwell, C.E., and J.D. Kasarda. 1980. Conceptualizing and measuring the effects of school and schooling. *American Journal of Education*. 88:401-430.

Block, J.H., and B. Burns. 1976. Mastery Learning. *Review of Research in Education. Vol. 5.* Ed. L.S. Shulman, Itasca, IL: Peacock.

Bloom, B. 1976. *Human Characteristics and School Learning.* New York: McGraw-Hill.

Blumberg, A., and W. Greenfield. 1980. *The Effective Principal: Perspectives on School Leadership.* Boston: Allyn and Bacon.

Bossert, S.T. 1984. Effective Elementary Schools. Chapter 2 prepared for this volume.

_____ 1981. Understanding sex differences in children's classroom experiences. *The Elementary School Journal.* 18:254-66.

_____ 1979. *Tasks and Social Relationships in Classrooms: A Study of Instructional Organization and its Consequences.* New York: Cambridge University Press.

Bossert, S., D. Dwyer, B. Rowan, and G. Lee. 1982. The instructional management role of the principal. *Education Administration Quarterly.* 18:3.

Boyer, E. 1983. *High School: A Report on Secondary Education in America.* New York: Harper & Row.

Broadbent, D. 1975. Cognitive psychology and education: *British Journal of Educational Psychology.* 45:162-176.

Brookover, W.B. 1981. *Effective Secondary Schools.* Philadelphia, PA: Research for Better Schools.

Brookover, W.B., C. Beady, P. Flood, J. Schweitzer, and J. Wisenbaker. 1979. *School Social Systems and Student Achievement: Schools Can Make a Difference.* New York: Praeger.

Brophy, J.E. 1983. Classroom organization and management. *Elementary School Journal.* 83(4):265-286.

_____ 1982. Classroom organization and management. Paper presented to the National Institute of Education Conference on Research on Teaching at Airlie House, VA.

_____ 1981. Teacher praise: A functional analysis. *Review of Educational Research.* 51:5-32.

_____ 1979. Teacher behavior and its effects. *Journal of Educational Psychology.* 71(6):733-750.

Brophy, J.E. and T.L. Good. 1984. *Looking In Classrooms* (3rd edition). New York: Harper & Row.

_____ 1974. *Teacher-Student Relationships: Causes and Consequences.* New York: Holt, Rinehart and Winston.

Brown, A.L., and J.C. Campione. 1977. *Memory Strategies in Learning: Training Children to Study Strategically* (Tech. Rep. 22). Urbana, IL: Center for the Study of Reading (University of Illinois).

Brown, J.S., and K. VanLehn. 1979. *Towards a Generative Theory of "Bugs".* Palo Alto, CA: Xerox Palo Alto Research Center, Cognitive and Instructional Sciences.

Buckholdt, D., and J. Wodarski. 1974. The effects of different reinforcement systems on cooperative behaviors exhibited by children in classroom contexts. Paper presented at annual meeting of American Educational Research Association, New Orleans, LA.

Burnes, D., *S. Fuhrman, A. Odden, and R. Palaich.* 1983. State initiated school improvement: A study of four states. Denver, CO: Education Commission of the States.

Calfee, R., and R. Brown. 1979. Grouping for instruction. *Classroom Management: The 78th Yearbook of the National Society for the Study of Education.* Part III. Ed. D. Duke. Chicago, IL: NSSE.

Calfee, R., and J. Shefelbine. 1981. A structured model of teachsroom management: The 78th YearEd. Lewey and DeNevo. New York: Cordon and Breck.

California Assembly Office of Research. *Overcoming the Odds: Making High Schools Work.* Sacramento, CA.

Cameron, K.S., and D.A. Whetten. 1983. *Organizational Effectiveness: A Comparison of Multiple Models.* New York: Academic Press.

Cantor, L. Assertive Discipline Training Program. Lee Cantor and Associates, 1553 Euclid Street, Santa Monica, California 90404.

Carnine, D.W., and M. Stein. 1981. Strategy and organizational practice procedures for teaching basic facts. *Journal for Research in Mathematics Education.* 12:65-69.

Chase, C.M., and M.B. Kane. 1983. The principal as instructional leader: How much time before we act? Denver, CO: Education Commission of the States.

Chi, M.T.H., P. Feltovich, and R. Glaser. 1981. Categorization and representation of physics problems by experts and novices. *Cognitive Science.* 5:121-152.

Clark, D.L., L.S. Lotto, and T.A. Astuto. 1984. Effective schools and school improvement: A comparative analysis of two lines of inquiry. *Educational Administrator Quarterly.* 20(3):41-68.

Clark, T., and D. McCarthy. 1983. School improvement in New York City: The evolution of a project. *Educational Researcher.* 12:17-24.

Cohen, M. 1983. Instructional, management and social conditions in effective schools. *School Finance and School Improvement: Linkages for the 1980s.* Ed. A. Odden and L.D. Webb. Cambridge, MA: Ballinger.

Coleman, J., T. Hoffer, and S. Kilgore. 1982. Cognitive outcomes in public and private schools. *Sociology of Education* 55 (2/3):65-76.

Collins, A., and E.E. Smith. 1980. *Teaching the Process of Reading Comprehension*. (Tech. Rep. 182.) Urbana, IL: Center for the Study of Reading, University of Illinois.

Collins, A., and A. Stevens. 1982. Goals and strategies of inquiry teachers. *Advances in Instructional Psychology, Vol. II*. Ed. R. Glaser. Hillsdale, NJ: Lawrence Erlbaum Associates.

Cooley, W.W., and G. Leinhardt. August 1978. *The Instructional Dimensions Study: The Search for Effective Classroom Processes*. Pittsburgh, PA: Learning Research and Development Center, University of Pittsburgh.

Corcoran, T.B., and B.J. Hansen, 1983. *The Quest for Excellence: Making Public Schools More Effective*. Trenton, NJ: The New Jersey School Boards Association.

Corcoran, T.B., and B.L. Wilson, ND. *Characteristics of Exemplary High Schools*. Philadelphia, PA: Research for Better Schools.

Covington, M., and R. Beery. 1976. *Self-worth and School Learning*. New York: Holt, Rinehart and Winston.

Cox, P.L. 1983. Complementary roles in successful change. *Educational Leadership* 41:3.

Crandall, D., et al. 1982. *Helping Schools Get Better: Strategies for School Development in the 1980s—Final Report*. Andover, MA: The Network.

Crandall, D.P., and S.F. Loucks. 1983. *A Roadmap for School Improvement*, Vol. X of *People, Policies and Practices: Examining the Chain of School Improvement*. Andover, MA: The Network.

Cuban, L. 1984. Transforming the frog into a prince: Effective schools research, policy and practices at the district level. *Harvard Educational Review*. 54(2):129-151.

Cullinan, D., J. Lloyd, and M.H. Epstein. 1981. Strategy training: A structured approach to arithmetic instruction. *Exceptional Education Quarterly*. 2:41-49.

Cusick, P. 1983. *The Egalitarian Ideal and the American High School*. New York: Longman.

_____ 1981. An rx for our high schools. *Character*. 2(7):1-6.

Dalhoff, U. 1971. *Ability Grouping, Content Validity, and Curriculum Process Analysis*. New York: Teachers College Press.

D'Amico, J. 1982. Using effective schools studies to create effective schools: No recipe yet. *Educational Leadership*. 40(3):60-62.

Darling-Hammond, L. 1984. *Beyond the Commission Reports: The Coming Crisis in Teaching*. R-3177-RC, Rand Corporation.

Datta, L. 1980. Changing times: The study of federal programs supporting educational change and the case for local problem solving. *Teachers College Record*. 82(1):101-116.

Davis, R.B., and C. McKnight. 1976. Conceptual, heuristic, and S-algorithmic approaches in mathematics teaching. *Journal of Children's Mathematical Behavior* 1 (Supplement 1): 271-286.

Deal, T.E. 1983. Searching for the wizard: The symbolism of effective schools. Paper prepared for the National Institute of Education.

Deal, T.E., and A.A. Kennedy. 1982. *Corporate Cultures: The Rites and Rituals of Corporate Life*. Reading, MA: Addison-Wesley Publishing Co.

Denham, C., and A. Lieberman. eds. 1980. *Time to Learn*. Washington, DC: National Institute of Education.

Dershimer, G. 1983. Instructional strategy and the "creation" of classroom status. *American Educational Research Journal*. 20:(4)645-661.

Doyle, W. 1984a. How order is achieved in classrooms: An interim report. *Journal of Curriculum Studies*. 16(3):259-277.

_____ 1984b. Patterns of academic work in junior high school science, English, and mathematics classes. Paper presented at the annual meeting of the American Educational Research Association, New Orleans, LA.

_____ 1983. Academic work. *Review of Educational Research*. 53(2): 159-199.

_____ 1980. *Classroom Management*. West Lafayette, IN: Kappa Delta Pi.

_____ 1979. The tasks of teaching and learning in classrooms. Paper presented at the annual meeting of the American Educational Research Association, San Francisco, CA.

Doyle, W., and K. Carter. 1984. Academic tasks in classrooms. *Curriculum Inquiry*. 14(2): 129-149.

Doyle, W., J.P. Sanford, B.S. Clements, B. French, and E.T. Emmer. 1983. *Managing Academic Tasks: Interim Report of the Junior High School Study* (R&D Rep. 6186.) Austin: Research and Development Center for Teacher Education, The University of Texas at Austin.

Drucker, P. 1973. *Management: Tasks, Practices, Responsibilities*. New York: Harper & Row.

Dunnette, M.B. ed. 1976. *Handbook of Industrial and Organizational Psychology*. Chicago, IL: Rand McNally.

Dwyer, D., G. Lee, B. Rowan, and S. Bossert. 1983. *Five Principals in Action: Perspectives on Instructional Leadership*. San Francisco: Far West Laboratory for Educational Research and Development.

Eaton, J.F., C.W. Anderson, and E.L. Smith. 1984. Students' misconceptions interfere with science learning: Case studies of fifth-grade students. *Elementary School Journal*. 84:365-379.
Emonds, R. 1982. Programs of school improvement. *Educational Leadership*. 40:3.
_____ 1979. Effective schools for the urban poor. *Educational Leadership*. 37:1.
_____ 1979. Some schools work and more can. *Social Policy*. 9:32.
Edmonds, R.R., and J.R. Frederiksen. 1979. *Search for Effective Schools: The Identification and Analysis of City Schools That Are Instructionally Effective for Poor Children*. Cambridge, MA: Center for Urban Studies, Harvard University.
Educational Research Service. 1981. *Coleman Report on Public and Private Schools: The Draft Summary and Eight Critiques*. Arlington, VA: Author.
Elmore, R., and M. McLaughlin. 1982. Strategic choice in federal education policy: The compliance-assistance tradeoff. *Policy Making in Education*. Ed. A. Lieberman and M. McLaughlin. Chicago, IL: University of Chicago Press.
Emmer, E.T., C.M. Evertson, J.P. Sanford, B.S. Clements, and M.E. Worsham. 1984. *Classroom Management for Secondary Teachers*. Englewood Cliffs, NJ: Prentice-Hall, Inc.
Entwisle, D., and L. Haydek. 1978. *Too Great Expectations: The Academic Outlook of Young Children*. Baltimore, MD: The Johns Hopkins University Press.
Erickson, F., and G. Mohatt. 1982. Cultural organization of participation structures in two classrooms of Indian students. *Doing the Ethnography of Schooling*. Ed. G. Spindler. New York: Holt, Rinehart and Winston.
Erlwanger, S.H. 1975. Case studies of children's conceptions of mathematics—Part I. *Journal of Children's Mathematical Behavior*. 1:157-283.
Etzioni, A. 1982. Schools: Educational experience first—Part I. *American Education*. 18(9):6-10.
_____ 1982. Schools: educational experience first—Part II. *American Education*. 18(10)2-7.
Eubanks, E.E., and D.U. Levine. 1983. A first look at effective schools projects in New York City and Milwaukee. *Educational Leadership*. 64:10.
Evertson, C., C. Anderson, L. Anderson, and J. Brophy. 1980. Relationships between classroom behaviors and student outcomes in junior high mathematics and English classes. *American Educational Research Journal*. 17(1):43-60.
Evertson, C., L. Anderson, and E. Emmer. 1980. Effective management at the beginning of the school year. *Elementary School Journal*. 80:219-231.
Evertson, C., E. Emmer, B. Clements, J. Sanford, and M. Worsham. 1984. *Classroom Management for Elementary Teachers*. Englewood Cliffs, NJ: Prentice-Hall, Inc.

Falsey, B., and B. Heyns. 1984. The college channel: Private and public schools reconsidered. *Sociology of Education*. 57(2):111-122.
Farrar, E., M.B. Miles, and B. Neufeld. January 1983. A review of effective schools research: The message for secondary schools. Paper prepared for the National Commission on Excellence in Education. Cambridge, MA: The Huron Institute.
Farrar, E., B. Neufeld, and M.B. Miles. 1984. Effective schools programs in high schools: Social promotion or movement by merit. *Phi Delta Kappan*. 65(10):701-706.
Farren, S.N. 1983. Reading assignments across the curriculum: A research report. Paper presented at the annual meeting of the International Reading Association, Anaheim, CA.
Filby, N.N., et al. 1980. *What Happens in Smaller Classes?* San Francisco: Far West Laboratory for Educational Research and Development.
Finn, C.E. 1984. Towards strategic independence. Nine commandments for enhancing school effectiveness. *Phi Delta Kappan*. 65:8.
Firestone, W.A. 1983. *On Saving the Baby While Testing the Bathwater: Effective Schools Programs and Planned Change Research*. Philadelphia, PA: Research for Better Schools.
Firestone, W.A. and R.E. Herriott. 1982. Prescriptions for effective elementary schools don't fit secondary schools. *Educational Leadership*. 40(3):51-53.
Firestone, W.A., and B.L. Wilson. 1983. *Using Bureaucratic and Cultural Linkages to Improve Instruction: The High School Principal's Contributions*. Philadelphia, PA: Research for Better Schools.
Fisher, C., D. Berliner, N. Filby, R. Marliave, L. Cahern, and M. Dishaw. 1980. Teaching behaviors, academic learning time, and student achievement: An overview. *Time to Learn*. Ed. C. Denham and A. Lieberman. Washington, DC: National Institute of Education.
Fisher, C., N. Filby, R. Marliave, L. Cahern, M. Dishaw, J. Moore, and D. Berliner. 1978. *Teaching Behaviors, Academic Learning Time and Student Achievement: Final Report of Phase III-B, Beginning Teacher Evaluation Study*. San Francisco, CA: Far West Laboratory for Educational Research and Development.
The Ford Foundation. 1984. *City High Schools: A Recognition of Progress*. New York: The Ford Foundation.
Fruchter, N. 1982. *School Improvement Programs: A Brief Review*. A discussion paper written for MEDARP, Office of Educational Evaluation, New York City Public Schools.

Fullan, M. July 1983. Change processes and strategies at the local level. Paper prepared for the National Institute of Education.

_____ 1982. *The Meaning of Educational Change*. New York: Teachers College Press.

Fullan, M., M.B. Miles, and G. Taylor. 1980. Organization development in schools: The state of the art. *Review of Educational Research*. 50(1):121-183.

Glass, G.V., and M.L. Smith. 1979. *Meta-Analysis of Research on the Relationship Between Class-Size and Achievement*. San Francisco: Far West Laboratory for Educational Research and Development.

Glasser, W. 1977. Ten steps to good discipline. *Today's Education*. 66:61-63.

_____ 1969. *Schools Without Failure*. New York: Harper & Row.

Gold, S., and C.L. Eckl. 1984. State fiscal conditions entering 1984. Legislative Finance Paper No. 42, Denver, CO: National Conference of State Legislatures.

Good, T.L. 1983. Classroom research: A decade of progress. *Educational Psychologist*. 18(3):127-144.

_____ 1983. Research on Classroom Teaching. *Handbook of Teaching and Policy*. Ed. L.S. Shulman and G. Sykes. New York: Longman.

Good, T.L., B.J. Biddle, and J.E. Brophy. 1983. Teaching effectiveness: Research findings and policy implications. Paper prepared for the National Institute of Education.

Good, T.L., and J.E. Brophy. ND. School Effects. *The Handbook of Research on Teaching*.

Good, T.L., and D.A. Grouws. 1981. *Experimental Research in Secondary Mathematics Classrooms: Working with Teachers*. Columbia, MO: University of Missouri.

_____ 1979. The Missouri mathematics effectiveness project: An experimental study in fourth grade classrooms. *Journal of Educational Psychology*. 71:335-362.

Good, T., D. Grouws, and H. Ebmeier. 1983. *Active Mathematics Teaching*. New York: Longman.

Good, T.L., and D.J. Stipek. 1983. Individual differences in the classroom: A psychological perspective. *Individual Differences and the Common Curriculum*. Ed. G. Fenstermacher and J. Goodlad. *82nd yearbook of the National Society for the Study of Education*. Chicago, IL: University of Chicago Press.

Goodlad, J.I. 1984; 1983. *A Place Called School: Prospects for the Future*. New York: McGraw-Hill.

Goodman, P.S., and J.S. Pennings. 1979. *New Perspectives on Organizational Effectiveness*. San Francisco: Jossey Bass.

Grant, G. 1982. The elements of a strong positive ethos. *NASSP Bulletin*. 66(452):84-90.

Green, J., and D. Smith. 1982. Teaching and learning: A linguistic perspective. Paper presented at the National Institute of Education Conference on Research on Teaching at Airlie House, Virginia.

Greeno, J.G. 1983. Skills for representing problems. Paper presented at the annual meeting of the American Educational Research Association, Montreal, Canada.

Greisemer, J.L., and C. Butler. 1983. *Education Under Study: An Analysis of Recent Reports*. Chelmsford, MA: Northeast Regional Exchange.

Griffin, G.A. 1982. Staff development. Paper presented at the National Institute of Education Conference on Research on Teaching at Airlie House, VA.

Grove, A. 1984. *High Output Management*. Westminster, MD: Random House.

Hall, G.E., and F.M. Guzman. 1984. *Sources of Leadership for Change in High Schools*. (R&D Report No. 3185). Austin, TX: Research and Development Center for Teacher Education.

Hall, G.E., and S.F. Loucks. 1982. Bridging the gap: policy research rooted in practice. *Policy Making in Education*. Ed. A. Lieberman and M. McLaughlin. Chicago, IL: University of Chicago Press.

Hanford, G. As quoted in the *San Francisco Chronicle*, January 29, 1983, page 3.

Hansen, J. 1981. The effects of inference framing and practice on young children's reading comprehension. *Reading Research Quarterly*. 16:391-417.

Harnischfeger, A., and D. Wiley. 1978. Conceptual and policy issues in elementary school teacher learning. Paper presented at the annual meeting of the American Educational Research Association, Toronto, Canada.

_____ 1976. The teaching-learning process in elementary schools: A synoptic view. *Curriculum Inquiry* 6:5-43.

Harvey, G., P.L. Cox, and D.P. Crandall. 1984. Implementing the recommendations of the National Commission and studies of education, or what they failed to mention. Paper presented to the annual meeting of the American Educational Research Association, New Orleans, LA.

Heller, J.I., and F. Reif. 1984. Prescribing effective human problem-solving processes: Problem description in physics. *Cognition and Instruction*. 1(2):177-216.

Heller, J.I., F. Reif, and H.N. Hungate. 1983. Toward theory-based instruction in scientific problem solving. Paper presented at the annual meeting of the American Educational Research Association, Montreal, Canada.

Henderson, A. 1981. *Parent Participation—Student Achievement: The Evidence Grows*. Columbia, MD: National Committee for Citizens in Education.

Hord, S.M. 1984. *Facilitating Change in High Schools: Myths and Management*. (R&D Report No. 3187.) Austin, TX: Research and Development Center for Teacher Education.

Huberman, A.M. 1983. School improvement strategies that work: Some scenarios, *Educational Leadership*. 41:3.

Hunter, M. Increasing Teacher Effectiveness Training Program. University of California at Los Angeles.

Hunter, M. 1984. Knowing, teaching, and supervising. *Using What We Know About Teaching*. Ed. P.L. Hosford, Alexandria, VA: ASCD.

Jones, F.H. Classroom Management Training Program. 64 Alta Vista Drive, Santa Cruz, CA 95060.

Joyce, B. 1978-1979. Toward a theory of information processing in teaching. *Education Research Quarterly*. 3:66-67.

Joyce, B., and B. Showers. 1982. On coaching teaching. *Educational Leadership*. 40:1.

Karweit, N. 1982. *Time On Task: A Research Review*. (Rep. 332.) Baltimore, MD: Center for Social Organization of Schools, Johns Hopkins University.

King, L.H. 1980. *Student Thought Processes and the Expectancy Effect*. (Res. Rep. 80-1-8) Edmonton, Canada: Centre for Research in Teaching, The University of Alberta.

Kirst, M.W. 1983a. Effective schools: Political environment and education policy. *Planning and Change*. 234-244.

_____1983b. Policy implications of individual differences and the common curriculum. *Individual Differences and the Common Curriculum, 82nd Yearbook of the National Society for the Study of Education*. Ed. G.D. Fenstermacher and J.I. Goodlad. Vol. I. Chicago, IL: University of Chicago Press.

_____ 1983. *The Turbulent Nature of the U.S. Secondary School Curriculum*. (Policy Paper No. 83-C6). Palo Alto, CA: Stanford University, Institute for Research on Educational Finance and Governance.

_____ 1981. Loss of support for public secondary schools: Some causes and solutions. *Daedalus*. 110(3):45-68.

Knapp, M., et al. 1983. *Cumulative Effects of Federal Education Policies on School Districts*. Menlo Park, CA: SRI International.

Kotter, J.P. 1982. What effective general managers do. *Harvard Business Review*. 60:2.

Kounin, J.S. 1970. *Discipline and Group Management in Classrooms*. New York: Holt, Rinehart and Winston.

Kulik, J.A., C.A., Kulik, and P.A. Cohen. 1979. A meta-analysis of outcomes studies of Keller's personalized system of instruction. *American Psychologist*. 38:307-318.

Levine, J. 1983. Social comparison and education. *Teacher and Student Perceptions: Implications for Learning*. Ed. J. Levine and M. Wang. Hillsdale, NJ: Lawrence Erlbaum Associates.

Levine, M. 1984. *Excellence In Education. Some Lessons From America's Best-Run Companies & Schools*. Report prepared for the Committee for Economic Development.

Lightfoot, S.L. 1983. *The Good High School: Portraits of Character and Culture*. New York: Basic Books.

Lindsay, P. 1982. The effect of high school size on student participation, satisfaction and attendance. *Educational Evaluation and Policy Analysis* 4(1):57-66.

Lipsitz, J. 1984. *Successful Schools for Young Adolescents*. New Brunswick, NJ: Transaction Books.

_____ 1983. *Growing Up Forgotten: A Review of Research and Programs Concerning Early Adolescence*. New Brunswick, NJ: Transaction Books.

Little, J.W. 1982. Norms of collegiality and experimentation: Workplace conditions in schools. *American Educational Research Journal*. 19(3):325-340.

_____ 1982. The effective principal. *American Education*. 18(7).

Louis, K.S., and S. Rosenblum. 1981. *Linking R&D with Local Schools: A Summary of Implications for Dissemination and School Improvement Programs*. Cambridge, MA: Abt Associates.

Louis, K.S., S. Rosenblum, and J. Molitor. 1981. *Strategies for Knowledge Use and School Improvement*. Washington, DC: National Institute of Education.

Mackenzie, D. 1983. Research for school improvement: An appraisal of some recent trends. *Educational Researcher*. 12(4):5-16.

Madaus, G.F., P.W. Airasian, and T. Kellaghan. 1980. *School Effectiveness: A Reassessment of the Evidence*. New York: McGraw-Hill.

Manassee, L.A. 1984. Principals as leaders in high performing systems. *Educational Leadership*. 41:4.

———1983. Improving conditions for principal effectiveness: Policy implications of research on effective principals. Paper prepared for the National Institute of Education.

Mayer, R.E., and J.G. Greeno. 1972. Structural differences between learning outcomes produced by different instructional methods. *Journal of Educational Psychology*. 63:165–173.

McCormack-Larkin, M., and W. Kritek. 1982. Milwaukee's Project RISE. *Educational Leadership*. 40:16–21.

McDill, E.L., E.D. Meyers, and L.C. Rigsby. 1967. Institutional effects on the academic behavior of high school students. *Sociology of Education*. 40(1):181–189.

McDonnel, L., and M.W. McLaughlin. 1982. *Educational Policy and the Role of the States*. Santa Monica, CA: The Rand Corporation.

McLaughlin, M.W. 1983. State involvement in local education quality. *School Finance and School Improvement: Linkages for the 1980s*. Ed. A. Odden and L.D. Webb. Cambridge, MA: Ballinger.

Metropolitan Educational Development and Research Project Documentation Unit. 1983. *The High School Improvement Project, 1982-83*. (OEE Evaluation Report). New York: New York City Public Schools, Office of Educational Evaluation.

Metz, M., 1978. *Classrooms and Corridors*. Berkeley, CA: University of California Press.

Michigan Association of School Boards, 1983. *School Boards Planning for Excellence: A Guidebook for the Study of Selected Excellence Reports*. Lansing, MI: Author.

Miles, M. 1981. Mapping the common properties of schools. *Improving Schools: Using What We Know*. Ed. R. Lehming and M. Kane. Beverly Hills, CA: Sage.

Miles, M.B., E. Farrar, and B. Neufeld. 1983. *The Extent of Adoption of Effective Schools Programs*. Vol. II of Review of Effective Schools Programs prepared for the National Commission on Excellence in Education. Cambridge, MA: The Huron Institute.

Milne, A. M., et al. 1982. *Serving Special Needs Children: The State Approach*. Washington, DC: Decision Resources.

Monk, D. 1981. Toward a multilevel perspective on the allocation of educational resources. *Review of Educational Research*. 51:215–256.

Moore, M.T., et al. 1983. *The Interactions of Federal and Related State Education Programs*, Washington, DC: Educational Policy Research Institute.

Morgan, W.R. 1983. Learning and student life quality of public and private school youth. *Sociology of Education*. 56(4):187–202.

Murphy, J.T. 1982. Progress and problems. *Policy Making in Education*. Ed. A. Lieberman and M. McLaughlin. Chicago, IL: University of Chicago Press.

National Commission on Excellence in Education. 1983. *A Nation at Risk: The Imperative for Educational Reform*. Washington, DC: U.S. Department of Education.

National Institute of Education. September 1978. *Compensatory Education Study—A Final Report from the National Institute of Education*. Washington, DC: Author.

Needels, M. 1982. Industry's willingness to collaborate with the education system: A survey of California's Silicon Valley. Menlo Park, CA: SRI International.

Neufeld, B., E. Farrar, and M.B. Miles. 1983. *A Review of Effective Schools Research: The Message for Secondary Schools*. Prepared for the National Commission on Excellence in Education. Cambridge, MA: The Huron Institute.

Newman, F.M., and S.L. Behar. November 1982. The study and improvement of American high schools: A portrait of work in progress. Paper prepared for the Wingspread Conference on Improving the American High School, Racine, Wisconsin.

Newman, F., M.S. Smith, and G. Wehlage. 1983. *The Effects of Comprehensive High Schools on Students: A Feasibility Study*. Unpublished manuscript. Madison, WI: University of Wisconsin, Wisconsin Center for Education Research.

Noli, P. 1980. A principal implements BTES. *Time to Learn*. Ed. C. Denham and A. Lieberman. Washington, DC: U.S. Department of Education.

Odden, A. 1984. *Education Finance in the States: 1984*. Denver, CO: Education Commission of the States.

Odden, A., and V. Dougherty. 1982. *State Programs of School Improvement: A Fifty State Survey*. Denver, CO: Education Commission of the States.

Passow, A.H. 1984. *Reforming Schools in the 1980's: A Critical Review of the National Reports*. No. 87. New York: ERIC Clearinghouse on Urban Education, Urban Diversity Services.

———1984. Tackling on the reform reports of the 1980's. *Phi Delta Kappan*. 65(10):675–683.

———1977. The future of the high school. *Teachers College Record*. 79(1):15–31.

Pearson, P.D., and R.J. Tierney. 1984. On becoming a thoughtful reader: Learning to read like a writer. *Becoming Readers in a Complex Society. Eighty-third Yearbook of the National Society for the Study of Education*. Ed. A.C. Purves and O. Niles. Chicago, IL: University of Chicago.

Persell, C.H. 1982. Effective principals: what do we know from the research literature? Paper prepared for the National Institute of Education.

Peters, T.J., and R.H. Waterman, Jr. 1983; 1982. *In Search of Excellence*. New York: Harper & Row.

Peterson, P.L., and T.C. Janicki. 1979. Individual characteristics and children's learning in large-group and small-group approaches. *Journal of Educational Psychology*. 71:677–687.

Peterson, P.L., L.C. Wilkerson, and M. Hallinan. eds. 1984. *The Social Context of Instruction: Group Organization and Group Processes*. New York: Academic Press.

Pilcher, D. 1983. Taxpayers will support more funds for schools, only if improvements assured. *State Legislatures*. 9:9.

Pincus. J., and R.C. Williams. 1979. Planned change in urban school districts. *Phi Delta Kappan*. 60(1):729-732.

Pratzner, F.C. 1984. Quality of school life: Foundation for improvement. *Educational Researcher*. 13(3):20–25.

Purkey, S. 1984. *School Improvement: An Analysis of an Urban School District Effective Schools Project*. Madison, WI: Wisconsin Center for Education Research.

Purkey, S.C., and M.S. Smith. 1983. Effective schools: A review. *Elementary School Journal*. 83(4):427–452.

Ravitch, D. 1981. The meaning of the new Coleman report. *Phi Delta Kappan*. 62(1):718-720.

Resnick, L., and W. Ford. 1981. *The Psychology of Mathematics for Instruction*. Hillsdale, NJ: Lawrence Erlbaum Associates.

Roberts, J.M.E., and J.L. Kenney. 1984. *Instructional Improvement in Maryland: Impact on Educators and Students*. Philadelphia, PA: Research for Better Schools.

Rosenblum, S. and K.S. Louis. 1981, 1979. *Stability and Change Innovation in an Educational Context*. New York: Plenum.

Rosenholtz, S. and C. Simpson. 1984. The formation of ability conceptions: Developmental trend or social construction? *Review of Educational Research*. 54:31-64.

Rosenholtz, S., and M. Smylie. 1983. Effective teaching strategies: A synthesis of classroom research. Paper prepared for the Tennessee State Department of Education.

Rosenholtz, S., and B. Wilson. 1980. The effect of classroom structure on shared perceptions of ability. *American Educational Research Journal*. 17:75–82.

Rosenshine, B.V. 1983. Teaching functions in instructional programs. *Elementary School Journal*. 83:335–351. (1982. Paper presented to the National Institute of Education Conference on Research on Teaching at Airlie House, VA.)

Rosenshine, B., and D. Berliner. 1978. Academic engaged time. *British Journal of Teacher Education*. 4:3-16.

Rosenthal, A., and S. Fuhrman. 1981. *Legislative Education Leadership*. Washington, DC: The Institute for Educational Leadership.

Rossman, G., W.A. Firestone, and R. Corbett. In press. *Professional Cultures in Improving High Schools*. Philadelphia, PA: Research for Better Schools.

Rowan, B., S.T. Bossert, and D.C. Dwyer. 1983. Research on effective schools: A cautionary note. *Educational Researcher*. 12(4):24–31.

Rutherford, W.L. and L. Huling-Austin. 1984. *Changes in High Schools: What is Happening—What is Wanted?* (R&D Report No. 3184). Austin, TX: Research and Development Center for Teacher Education.

Rutter, M. 1983. School effects on pupil progress; Research findings and policy implications. *Handbook of Teaching and Policy*. Ed. L.S. Shulman and G. Sykes. New York: Longman.

Rutter, M., B. Maughan, P. Mortimore, J. Ouston, and A. Smith. 1979. *Fifteen Thousand Hours: Secondary Schools and Their Effects on Children*. Cambridge, MA: Harvard University Press.

Salaganik, L. H. and N. Karweit. 1982. Voluntarism and governance in education. *Sociology of Education*. 55(2/3):152-161.

Sanford, J.P., E.T. Emmer, and B.S. Clements. 1983. Improving classroom management. *Educational Leadership*. 40(7):56–60.

Scardamalia, M., C. Bereiter, and E. Woodruff. 1982. *Functional and Stylistic Choices in Computer-Assisted Instruction*. Paper presented at the annual meeting of the American Educational Research Association, New York.

Schlechty, P.C. Images of schools. *Teachers College Record*. (forthcoming)

_____ (Report in preparation for NIE grant number NIE-G-83-0064).

Schlechty, P.C., and V.S. Vance, 1983a. The promotion of quality in teaching. *School Finance and School Improvement: Linkages for the 1980s*. Ed. A. Odden and L. Webb. Cambridge, MA: Ballinger.

_____ 1983b. Recruitment, selection, and retention: The shape of the teaching force. *Elementary School Journal*. 83:469–487.

Schmuck, R., R. Francisco, and W. Bell. 1979. Renewing urban schools: Some recommendations. *Theory Into Practice*. 18(2):126-133.

Schmuck, R.A., and P.A. Runkel. 1972. *Handbook of Organization Development in Schools*. National Press.

Sergiovanni, T.J. 1984. Leadership and excellence in schooling. *Educational Leadership*. 41:4.

Sergiovanni, T.J. and J.E. Corbally, eds. 1984. *Leadership and Organizational Culture*. Urbana-Champaign: University of Illinois Press.

Sharan, S. 1980. Cooperative learning in small groups: Recent methods and effects on achievement, attitudes and ethnic relations. *Review of Educational Research*. 50(2):241-272.

Shavelson, R. 1982. *Review of Research of Teachers' Pedagogical Judgments, Plans and Decisions*. Los Angeles, CA: The Rand Corporation and The University of California.

Sizer, T. 1984. *Horace's Compromise: The Dilemma of the American High School*. Boston: Houghton-Mifflin Co.

Slavin, R.E. 1983. *Cooperative Learning*. New York: Longman.

_____ 1980. Cooperative learning. *Review of Educationel Research*. 50(2): 315-342.

_____ 1980. Effects of individualized learning on student achievement. *Journal of Educational Psychology*. 72:520-524.

Slavin, R.E., and N. Karweit. 1984. Mathematics achievement effects of three levels of individualization: whole class, ability grouped, and individualized instruction. Baltimore, MD: Johns Hopkins University, Center for Social Organization of Schools.

Slavin, R.E., M. Leavy, and N.A. Madden. 1984. Combining cooperative learning and individualized instruction: Effects on student mathematics achievement, attitudes and behaviors. *Elementary School Journal*. 84:409-422.

Soar, R.S., and R.M. Soar. 1983. Context effects in the teaching-learning process. Paper presented at the annual meeting of the American Association of Colleges for Teacher Education, Detroit, MI.

Spady, W.G., and G. Marx. 1984. *Excellence in Our Schools: Making It Happen*. Washington, DC: American Association of School Administrators and the Far West Laboratory for Educational Research and Development.

Stallings, J. Effective use of time training program. Peabody Center for effective teaching, Vanderbilt University, Nashville, TN.

Stallings, J. 1984. Madeline Hunter's model: A study of implementation and student effects. Paper presented at the annual American Educational Research Association meeting, New Orleans, LA.

_____ 1981. What research has to say to administrators of secondary schools about effective teaching and staff development. Paper presented at the Conference on Creating the Conditions for Effective Teaching, Center for Educational Policy and Management, University of Oregon, Eugene, OR.

_____ 1980. Allocated academic learning time revisited, or beyond time on task. *Educational Researcher*. 9:11-16.

_____ 1975. Implementations and child effects of teaching practices in follow through classrooms. *Monographs of the Society for Research in Child Development*. 40:7-8.

Stallings, J., R. Corey, J. Fairweather, and M. Needels. 1978. *A Study of Basic Reading Skills Taught in Secondary Schools*. Menlo Park, CA: SRI International.

Stallings, J., and D. Kaskowitz. 1974. *Follow Through Classroom Observation Evaluation, 1972-73*. Menlo Park, CA: SRI International.

Stallings, J., and G. Mohlman. 1981. *School Policy, Leadership Style, Teacher Change and Student Behavior in Eight Schools*. Final report prepared for the National Institute of Education. Washington, DC.

Stallings, J., M. Needels, and N. Stayrook. 1979. *How to Change the Process of Teaching Basic Reading Skills in Secondary Schools*. Final report to the National Institute of Education. Menlo Park, CA: SRI International.

Stallings, J., P. Robbins, and P. Wolfe. 1983. A staff development program to increase student learning time and achievement. Napa, CA.

Stein, B.A., 1983. *Quality of Worklife In Action: Managing for Effectiveness*. New York: American Management Association.

Stiegelbauer, S.M. 1984. *Community, Context and Co-Curriculum: Situational Factors Influencing School Improvements in the Study of High Schools*. (R&D Report No. 3186.) Austin, TX: Research and Development Center for Teacher Education.

Struening, E.L., and M. Guttentag. eds. 1975. *Handbook of Evaluation Research—Volume I*, Beverly Hills, CA: Sage.

Task Force on Education for Economic Growth. 1983. *Action for Excellence*. Denver, CO: Education Commission of the States.

Task Force on Federal Elementary and Secondary Education Policy. 1983. *Making the Grade: Report of the Task Force*. New York: The Twentieth Century Fund, Inc.

The College Board. 1983. *Academic Preparation for College: What Students Need to Know and Be Able to do*. New York: College Entrance Examination Board.

Thomas, J.A. 1977. *Resource Allocation in Classrooms*. Final Report No. G-74-0037. Washington, DC: National Institute of Education.

Timpane, M., S. Abramowitz, S.B. Bobrow, and A. Pascal. 1976. *Youth Policy In Transition*. Santa Monica, CA: Rand Corporation.

Tomlinson, T.M. May 1980. Student ability, student background and student achievement: Another look at life in effective schools. Paper presented at Educational Testing Service Conference on Effective Schools, New York, NY.

Tyack, D.B., M.W. Kirst, and E. Hansot. 1980. Educational reform: Retrospect and prospect. *Teachers' College Record*. 81(3):253-269.

Tye, K.A., and B.B. Tye. 1984. Teacher isolation and school reform. *Phi Delta Kappan*. 65(5):319-322.

U.S. Department of Education. 1983. National Center for Educational Statistics. *Digest of Education Statistics, 1983-84*. Washington, DC: U.S. Government Printing Office.

U.S. Department of Health, Education and Welfare. 1978. *Violent Schools-Safe Schools*. Vol. 1. Washington, DC: Author.

U.S. General Accounting Office. 1982. *Labor Market Problems of Teenagers Result Largely From Doing Poorly in School*. Gaithersburg, MD: Author.

Vaill, P.B. 1984. The purposing of high performing systems. *Leadership and Organizational Culture*. Ed. T.J. Sergiovanni and J.E. Corbally. Urbana-Champaign, IL: University of Illinois Press.

Venezky, R.L., and L. Winfield. 1979. *Schools That Succeed Beyond Expectations in Teaching Reading*. Technical Report #1, Department of Educational Studies, University of Delaware.

Vidich, A.J., and J. Bensman. 1968. *Small Town in Mass Society: Class, Power & Religion in a Rural Community*. Princeton: Princeton University Press.

Walker, D.F., and J. Schaffarzick. 1974. Comparing curricula. *Review of Educational Research*. *44:83-111*.

Webb, N. 1980. A process outcome analysis of learning in group and individual settings. *Journal of Educational Psychology*. 15:69-83.

Weber, G. 1971. *Inner City Children Can Be Taught to Read: Four Successful Schools*. Occasional Paper #18, Washington, DC: Council for Basic Education.

Weidman, J.C. and R.R. Friedman. 1984. Dropouts in school-to-work-transition. *The Urban Review*. 16(1):25-42.

Weinstein, R. 1982. Student perceptions of schooling. Paper presented to the National Institute of Education Conference on Research on Teaching at Airlie House, VA.

Wellisch, J.B., et al. 1978. School management and organization in successful schools. *Sociology of Education*. 51:211-226.

Wilcox, M. 1972. Comparison of elementary school children's interactions in teacher-led and student-led small groups. Dissertation. Stanford University, CA.

Wiley, D.E. 1976. Another hour, another day: Quantity of schooling, a potent path for policy. *Schooling and Achievement in American Sociey*. Ed. W.H. Sewell, R.M. Hauser, and D.L. Featherman. New York: Academic Press.

Willms, J.D. 1984. *Public and Private School Outcomes: Results From the High School and Beyond Follow-Up Study*. (Program Report No. 84-B4). Palo Alto, CA: Stanford University, Institute for Research on Educational Finance and Governance.

Wilson, B.L., and W.A. Firestone. 1984. *The Principal and Instruction: Combining Bureaucratic and Cultural Linkages*. Philadelphia, PA: Research for Better Schools.

Wirth, A.G. 1983. *Productive Work—In Industry and Schools: Becoming Persons Again*. Lanham, MD: University Press of America.

——— 1980. Socio-technical theory: An alternative paradigm for schools as "good work" places. *Teachers College Record*. 82(1):1-13.

Yinger, R. 1977. A study of teacher planning: Description and theory development using ethnographic and information processing models. Unpublished doctoral dissertation, Michigan State University.

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